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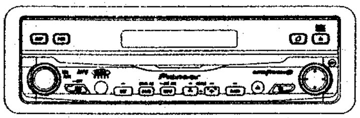
Pioneer sound.vision.soul

Service Manual


AVIC-N2/XU/UC

ORDER NO.
CRT3423

DVD MULTIMEDIA AV NAVIGATION SERVER

AVIC-N2/XU/UC

DVD AV NAVIGATION HEAD-UNIT

AVIC-X1R/XU/EW

This service manual should be used together with the following manual(s):

Model No.	Order No.	Mech.Module	Remarks
CX-3016	CRT3056	MS3	DVD Mech. Module:Circuit Description, Mech. Description, Disassembly

NOTE:
Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.
This product has the unit part number as below.

Unit Part No.	Description
CPN1955	Navigation Unit(AVIC-N2/XU/UC)
CPN1953	Hideaway Unit(AVIC-N2/XU/UC)
CPN1954	Navigation Unit(AVIC-X1R/XU/EW)
CPN1952	Hideaway Unit(AVIC-X1R/XU/EW)

*) The unit part numbers listed above are not for the service components.

For details, refer to "Important Check Points for Good Servicing".

PIONEER CORPORATION 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654, Japan
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PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936

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K-ZZW. FEB. 2005 Printed in Japan

SAFETY INFORMATION

UC

CAUTION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.
Health & Safety Code Section 25249.6 - Proposition 65

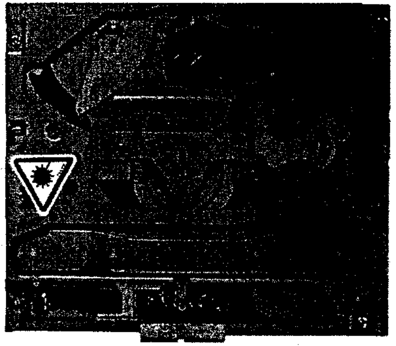
This product contains mercury. Disposal of this material may be regulated due to environmental considerations.
For disposal or recycling information, please contact your local authorities or the Electronics Industries Alliance: www.eiae.org.

EW

1. Safety Precautions for those who Service this Unit.
- **Follow the adjustment steps in the service manual when servicing this unit. When checking or adjusting the emitting power of the laser diode exercise caution in order to get safe, reliable results.**

Caution:
1. **During repair or tests, minimum distance of 13cm from the focus lens must be kept.**
2. **During repair or tests, do not view laser beam for 10 seconds or longer.**

2. The triangular label is attached to the mechanism unit frame.



CAUTION
This product contains a laser diode of higher class than 1. To ensure continued safety, do not remove any covers or attempt to gain access to the inside of the product.
Refer all servicing to qualified personnel.

The following caution label appears on your unit.

Location: on the bottom of the unit

CLASS 1
LASER PRODUCT

En

On the top of the player.

CAUTION :	VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN AVOID EXPOSURE TO BEAM.
VORSICHT :	SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETZEN!
ADVARSEL :	SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING UNDGÅ UDSÆTTELSE FOR STRÅLING.
VARNING :	SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD BETRAKTA EJ STRÅLEN
VARO! :	AVATTAESSA ALTISTUT NÄKYVÄ JA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE ÄLÄ KATSO SÄTEESEEN

VRW1860

WARNING!

The AEL (accessible emission level)of the laser power output is less than CLASS 1 but the laser component is capable of emitting radiation exceeding the limit for CLASS 1.
A specially instructed person should do servicing operation of the apparatus.

Laser diode characteristics
Wave length:
DVD:640~660nm
CD:770~810nm
Maximum output:2.48mw(Emitting period :9sec.)
DVD:705µw(Emitting period : unlimited)

Additionla Laser Caution

Transistors Q1101 and Q1102 in PCB drive the laser diodes for DVD and CD respectively. When Q1101 or Q1102 is shorted between their terminals, the laser diodes for DVD or CD will radiate beam. If the top cover is removed with no disc loaded while such short-circuit is continued, the naked eyes may be exposed to the laser beam.

● Service Precautions !

1. You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.

DVD MECHANISM MODULE section precaution

1. Before disassembling the unit, be sure to turn off the power. Unplugging and plugging the connectors during power-on mode may damage the ICs inside the unit.
2. To protect the pickup unit from electrostatic discharge during servicing, take an appropriate treatment (shorting-solder) by referring to "the DISASSEMBLY".
3. After replacing the pickup unit, be sure to check the grating.
4. During disassembly, be sure to turn the power off since an internal IC might be destroyed when a connector is plugged or unplugged.

NAVIGATION UNIT section precaution

1. Inverter for LCD back light becomes a high voltage.
2. When inspecting the touch panel, use something thin with a round tip such as the touch pen. Furthermore, do not apply excessive force to the touch panel.
3. Since this product does not have OSD IC, OSD for adjustment is displayed by using GGF1416 and GGF1463 at the time of monitor adjustment. As you will find lands for 14 pins with 0.8mm pitch at the left top part of the monitor board, directly solder a flexible PCB of GGD1323 for adjustment. As GGD1322 is not used, be careful not to short the terminal.
4. The region code determination at the time of DVD hardware change is made by the destination (UC: Region 1, EW: Region 2) of the car control unit.
5. If you reconnected the Hide-away unit, press the RESET button.

DVD VIDEO DVD VIDEO COMPACT disc DIGITAL AUDIO COMPACT disc DIGITAL AUDIO TEXT

dts® DIGITAL OUT

DVD is a trademark of DVD Format/Logo Licensing Corporation.

[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol.
Please be sure to confirm and follow these procedures.

1. Product safety

Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification(addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris.
Soldering should be finished with the proper quantity. (Refer to the example)

④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs.
In addition, be sure that there are no pinched wires, etc.

⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages.
If you find a damaged power cord, please exchange it with a suitable one.

⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries.
Please pay attention to your surroundings and repair safely.

2. Adjustments

To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification.
Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts

Use grease and adhesives that are equal to the specified substance.
Make sure the proper amount is applied.

4. Cleaning

For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws

To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

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1. SPECIFICATIONS

● AVIC-N2/XU/UC

General

Rated power source .... 14.4 V DC (10.8 - 15.1 V allowable)
Grounding system .... Negative type
  Max. current consumption .... 10.0 A
Backup current .... 6.5 mA or less
Display unit:
  Dimensions (W x H x D):
    DIN
    Chassis .... 178 x 50 x 160 mm (7 x 2 x 6-1/4 in.)
    Nose...................... 188 x 58 x 34 mm (7-3/8 x 2-1/4 x 1-3/8 in.)
    D
    Chassis .... 178 x 50 x 165 mm (7 x 2 x 6-1/2 in.)
    Nose...................... 170 x 46 x 29 mm (6-3/4 x 1-3/4 x 1-1/4 in.)
  Weight .... 2.5 kg(5.5 lbs)
Hideaway unit:
  Dimensions (W x H x D) .... 180 x 30 x 140 mm (5-7/8 x 1-1/8 x 3-7/8 in.)
  Weight .... 0.7 kg(1.5 lbs)

Navigation

GPS Receiver:
  System.......................... L1, C/Acode GPS
  SPS (Standard Positioning Service)
  Reception system .... 8-channel multi-channel reception system
  Reception frequency ... 1,575.42 MHz
  Sensitivity .... –130 dbm
  Position update frequency .... Approx. once per second

GPS antenna:
  Antenna......................... Micro strip flat antenna/ right-handed helical polarization
  Antenna cable.............. 5.0 m(16 ft. 5 in.)
  Dimensions (W x H x D) .... 33 x 13 x 36 mm (1-1/4 x 1/2 x 1-3/8 in.)
  Weight .... 105 g(0.23 lbs)

Display

Screen size/aspect ratio ..... 6.5 inch wide/16:9 (effective display area: 144 x 76 mm)
Pixels .... 336,960 (1,440 x 234)
Type.................................... TFT active matrix, transmissive type
Color system .... NTSC
Operating temperature range .... –14 – +122 °F
Storage temperature range .... –4 – +176 °F
Angle adjustment................ 50 – 110° (initial settings: 110°)

Audio

Continuous power output is 22 W per channel minimum into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD.

Maximum power output ...... 50 W x 4
  50 W x 2 ch/4 Ω + 70 W x 1 ch/2 Ω (for subwoofer)
Load impedance.................. 4 Ω (4 – 8 Ω [2 Ω for 1 ch] allowable)
Preout max output level/output impedance .... 2.0 V/100 ohm
Equalizer (3-Band Parametric Equalizer):
  Low
    Frequency .... 40/80/100/160 Hz
    Q Factor................. 0.35/0.59/0.95/1.15 (+6 dB when boosted)
    Gain .... ±12dB
  Mid
    Frequency .... 200/500/1k/2k Hz
    Q Factor................. 0.35/0.59/0.95/1.15 (+6 dB when boosted)
    Gain .... ±12dB
  High
    Frequency .... 3.15k/8k/10k/12.5k Hz
    Q Factor................. 0.35/0.59/0.95/1.15 (+6 dB when boosted)
    Gain .... ±12dB
Loudness contour
  Low .... +3.5 dB (100 Hz), +3 dB (10 kHz)
  Mid.................................. +10 dB (100 Hz), +6.5 dB (10 kHz)
  High.......................... +11 dB (100 Hz), +11 dB (10 kHz) (volume: –30 dB)
Tone controls:
  Bass
    Frequency .... 40/63/100/160 Hz
    Gain .... ±12dB
  Treble
    Frequency .... 2.5k/4k/6.3k/10k Hz
    Gain .... ±12dB
HPF:
  Frequency .... 0/80/125 Hz
  Slope.............................. –12 dB/oct
Subwoofer:
  Frequency .... 50/80/125 Hz
  Slope.............................. –18 dB/oct
  Gain .... ±12dB
  Phase .... Normal/Reverse

DVD Drive

System................................. DVD-Video, Compact disc audio, MP3 system
Usable discs .... DVD-Video, Compact disc, MP3
Region number..................... 1
Signal format:
  Sampling frequency.... 44.1/48/96 kHz
  Number of quantization bits .... 16/20/24; linear
Frequency response .... 5 – 44,000 Hz (with DVD, at sampling frequency 96 kHz)
Signal-to-noise ratio .... 97 dB (1 kHz) (IHF-A network) (CD: 96 dB (1 kHz) (IHF-A network))
Dynamic range .... 95 dB (1 kHz) (CD: 94 dB (1 kHz))
Distortion.............................. 0.008 % (1 kHz)
Output level:
  Video .... 1.0 Vp-p/75 Ω (±0.2 V)
  Audio .... 1.0 V (1 kHz, 0 dB)
Number of channels.............. 2 (stereo)
MP3 decoding format .... MPEG-1 & 2 Audio Layer 3

FM tuner

Frequency range.................. 87.9 – 107.9 MHz
Usable sensitivity.................. 8 dBf (0.7 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity...... 10 dBf (0.9 µV/75 Ω, mono)
Signal-to-noise ratio .... 75 dB (IHF-A network)
Distortion.............................. 0.3 % (at 65 dBf, 1 kHz, stereo)
  0.1 % (at 65 dBf, 1 kHz, mono)
Frequency response .... 30 – 15,000 Hz (±3 dB)
Stereo separation .... 45 dB (at 65 dBf, 1 kHz)
Selectivity .... 80 dB (±200 kHz)
Three-signal intermodulation (desired signal level) .... 30 dBf (two undesired signal level: 100 dBf)

AM tuner

Frequency range.................. 530 – 1,710 kHz (10 kHz)
Usable sensitivity.................. 18 µV (S/N: 20 dB)
Signal-to-noise ratio .... 65 dB (IHF-A network)

Note:
- Specifications and the design are subject to possible modifications without notice due to improvements.

● AVIC-X1R/XU/EW

General

Rated power source	14.4 V DC (allowable voltage range: 12.0 – 14.4 V DC)
Earthing system	Negative type
Max. current consumption	10.0 A
Backup current	6.5 mA or less
Display unit:	
Dimensions (W x H x D):	
DIN	
Chassis	178 x 50 x 160 mm
Nose	188 x 58 x 34 mm
D	
Chassis	178 x 50 x 165 mm
Nose	170 x 46 x 29 mm
Weight	2.5 kg
Hideaway unit:	
Dimensions (W x H x D)	180 x 30 x 140 mm
Weight	0.7 kg

Navigation

GPS Receiver:	
System	L1, C/Acode GPS SPS (Standard Positioning Service)
Reception system	8-channel multi-channel reception system
Reception frequency	1,575.42 MHz
Sensitivity	–130 dbm
Position update frequency	Approx. once per second
GPS aerial:	
Aerial	Micro strip flat aerial/righthanded helical polarization
Aerial cable	5.0 m
Dimensions (W x H x D)	33 x 13 x 36 mm
Weight	105 g

Display

Screen size/aspect ratio	6.5 inch wide/16:9 (effective display area: 144 x 76 mm)
Pixels	336,960 (1,440 x 234)
Type	TFT active matrix, transmissive type
Colour system	NTSC/PAL compatible
Operating temperature range	–10 – +50 °C
Storage temperature range	–20 – +80 °C
Angle adjustment	50 – 110° (initial settings: 110°)

Audio

Maximum power output	50 W x 4 50 W x 2 ch/4 Ω + 70 W x 1 ch/2 Ω (for subwoofer)
Continuous power output	27 W x 4 (DIN 45324, +B=14.4 V)
Load impedance	4 Ω (4 – 8 Ω [2 Ω for 1 ch] allowable)
Preout max output level/output impedance	2.0 V/100 ohm
Equalizer (3-Band Parametric Equalizer):	
Low	
Frequency	40/80/100/160 Hz
Q Factor	0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain	±12dB
Mid	
Frequency	200/500/1k/2k Hz
Q Factor	0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain	±12dB
High	
Frequency	3.15k/8k/10k/12.5k Hz
Q Factor	0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain	±12dB
Loudness contour	
Low	+3.5 dB (100 Hz), +3 dB (10 kHz)
Mid	+10 dB (100 Hz), +6.5 dB (10 kHz)
High	+11 dB (100 Hz), +11 dB (10 kHz) (volume: –30 dB)
Tone controls:	
Bass	
Frequency	40/63/100/160 Hz
Gain	±12dB
Treble	
Frequency	2.5k/4k/6.3k/10k Hz
Gain	±12dB
HPF:	
Frequency	50/80/125 Hz
Slope	–12 dB/oct
Subwoofer:	
Frequency	50/80/125 Hz
Slope	–18 dB/oct
Gain	±12dB
Phase	Normal/Reverse

DVD Drive

System	DVD-Video, Compact disc audio, MP3 system
Usable discs	DVD-Video, Compact disc, MP3
Region number	2
Signal format:	
Sampling frequency	44.1/48/96 kHz
Number of quantization bits	16/20/24; linear
Frequency response	5 – 44,000 Hz (with DVD, at sampling frequency 96 kHz)
Signal-to-noise ratio	97 dB (1 kHz) (IEC-A network) (CD: 96 dB (1 kHz) (IEC-A network))
Dynamic range	95 dB (1 kHz) (CD: 94 dB (1 kHz))
Distortion	0.008 % (1 kHz)
Output level:	
Video	1.0 Vp-p/75 Ω (±0.2 V)
Audio	1.0 V (1 kHz, 0 dB)
Number of channels	2 (stereo)
MP3 decoding format	MPEG-1 & 2 Audio Layer 3

FM tuner

Frequency range	87.5 – 108.0 MHz
Usable sensitivity	8 dBf (0.7 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity	10 dBf (0.9 µV/75 Ω, mono)
Signal-to-noise ratio	75 dB (IEC-A network)
Distortion	0.3 % (at 65 dBf, 1 kHz, stereo) 0.1 % (at 65 dBf, 1 kHz, mono)
Frequency response	30 – 15,000 Hz (±3 dB)
Stereo separation	45 dB (at 65 dBf, 1 kHz)
Selectivity	80 dB (±200 kHz)

MW tuner

Frequency range	531 – 1,602 kHz (9 kHz)
Usable sensitivity	18 µV (S/N: 20 dB)
Signal-to-noise ratio	65 dB (IEC-A network)

LW tuner

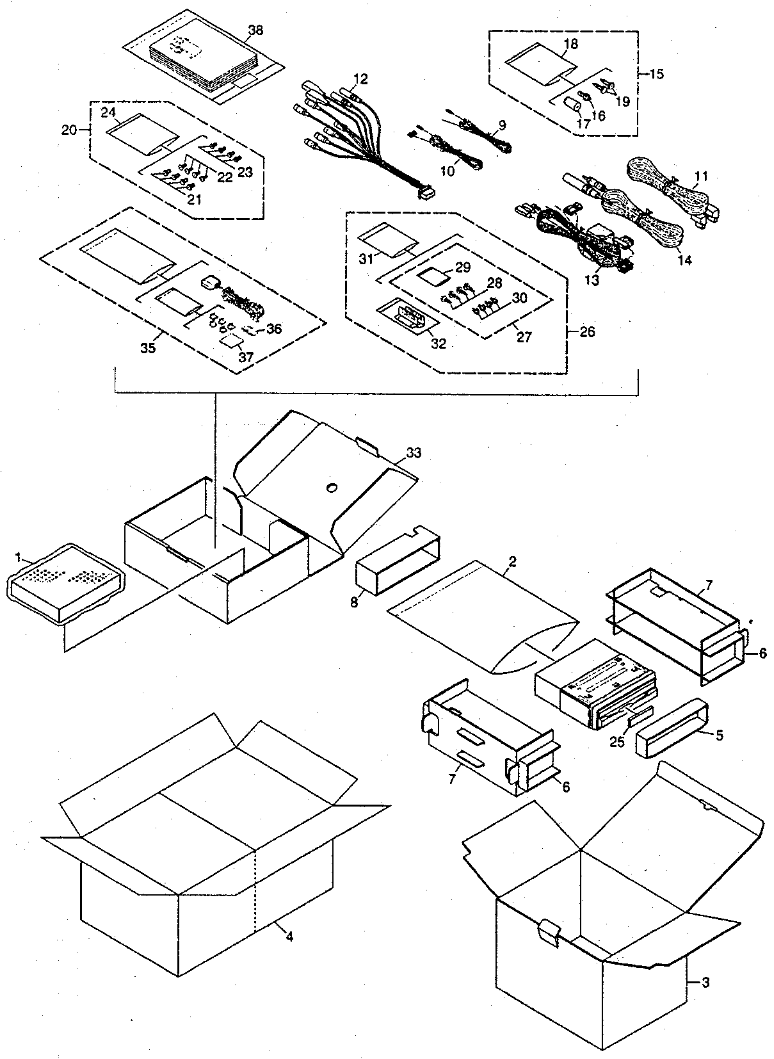
Frequency range	153 – 281 kHz (9 kHz)
Usable sensitivity	30 µV (S/N: 20 dB)
Signal-to-noise ratio	65 dB (IEC-A network)

Note:
- Specifications and the design are subject to possible modifications without notice due to improvements.

2. EXPLODED VIEWS AND PARTS LIST

NOTES : • *Parts marked by " * " are generally unavailable because they are not in our Master Spare Parts List.*
• *The ⚠ mark found on some component parts indicatesthe importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
• *Screw adjacent to▽ mark on the product are used for disassembly.*
• *For the applying amount of lobricants or glue, follow the instructions in this manual. (In the case of no amount instructions,apply as you think it appropriate.)*

2.1 PACKING (AVIC-N2/XU/UC)



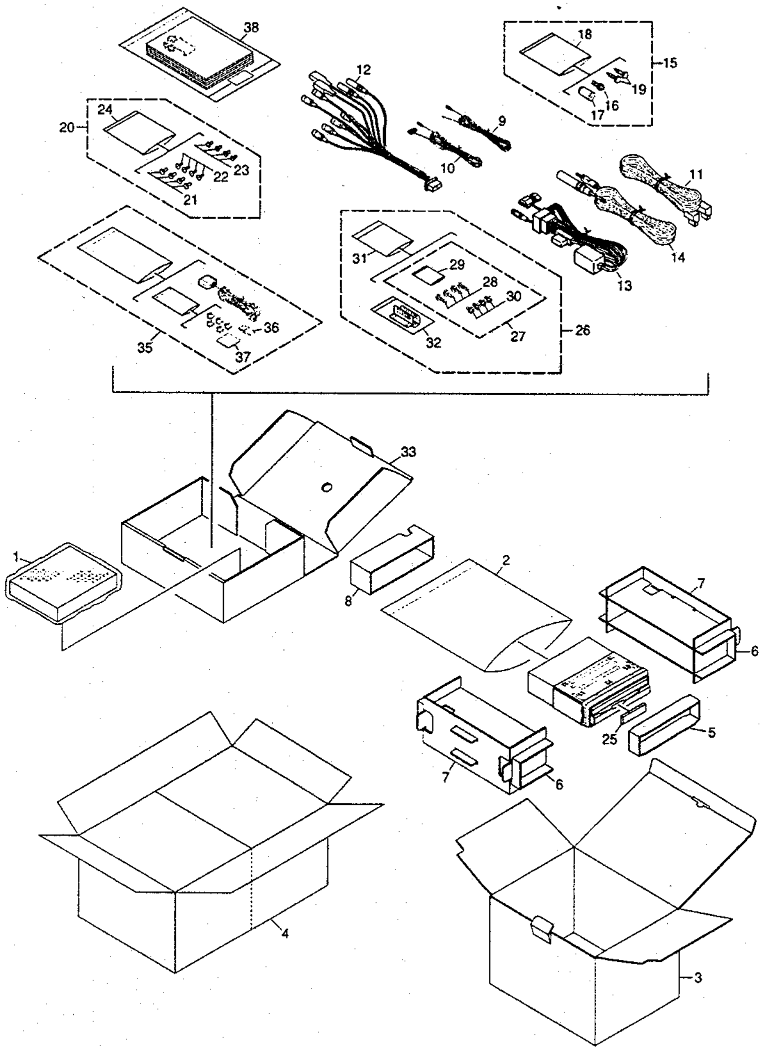
PACKING (AVIC-N2/XU/UC) SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Air Cushioned Bag	CEG1007
	2	Polyethylene Bag	CEG1173
	3	Carton	CHG5463
	4	Contain Box	CHL5463
	5	Protector	CHP2879
	6	Protector	CHP2877
	7	Protector	CHP2876
	8	Protector	CHP2945
	9	Cord	CDE5044
	10	Cord	CDE6825
	11	Cord Assy	CDE7398
	12	Cord Assy	CDE7399
	13	Cord Assy	CDE7487
	14	Antenna Cable	CDH1325
	15	Accessory Assy	CEA3685
	16	Screw	CBA1650
	17	Bush	CNV1917
•	18	Polyethylene Bag	E36-615
	19	Screw	JGZ20P070FTC
	20	Screw Assy	CEA3686
	21	Screw	BMZ50P060FTC
	22	Screw(M4x6)	CBA1468
	23	Screw	CMZ50P060FTC
•	24	Polyethylene Sheet	CNM4338
	25	Spacer	CNM9149
	26	Accessory Assy	CEA3996
	27	Screw Assy	CEA4396
	28	Screw	CBA1795
•	29	Polyethylene Sheet	CNM4338
	30	Screw	HMF40P080FTC
•	31	Polyethylene Bag	CEG1163
	32	Angle Assy	CXC1079
	33	Sub Carton	CHG5440
	34	*****	
	35	GPS Antenna Assy	CXC4864
	36	Water Proof Pad	CZN5442
	37	Sheet	CZN7008
	38-1	Polyethylene Bag	CEG1116
	38-2	Owner's Manual	CRB2025
	38-3	Owner's Manual	CRB2026
	38-4	Owner's Manual/POC/FRE	CRB2027
	38-5	Owner's Manual/POC/FRE	CRB2028
	38-6	Installation Manual	CRD3957
	38-7	Caution Card	CRP1310
•	38-8	Card	ARY1048
	38-9	Cleaning Cloth Assy	CEA3952
•	38-10	Registration Card	CRY1238
•	38-11	Caution Card	CRP1321
	38-12	Connector	CKX1049

● Owner's Manual, Installation Manual

Part No.	Language
CRB2025, CRB2026	English
CRB2027, CRB2028	French
CRD3957	English, French

2.2 PACKING (AVIC-X1R/XU/EW)



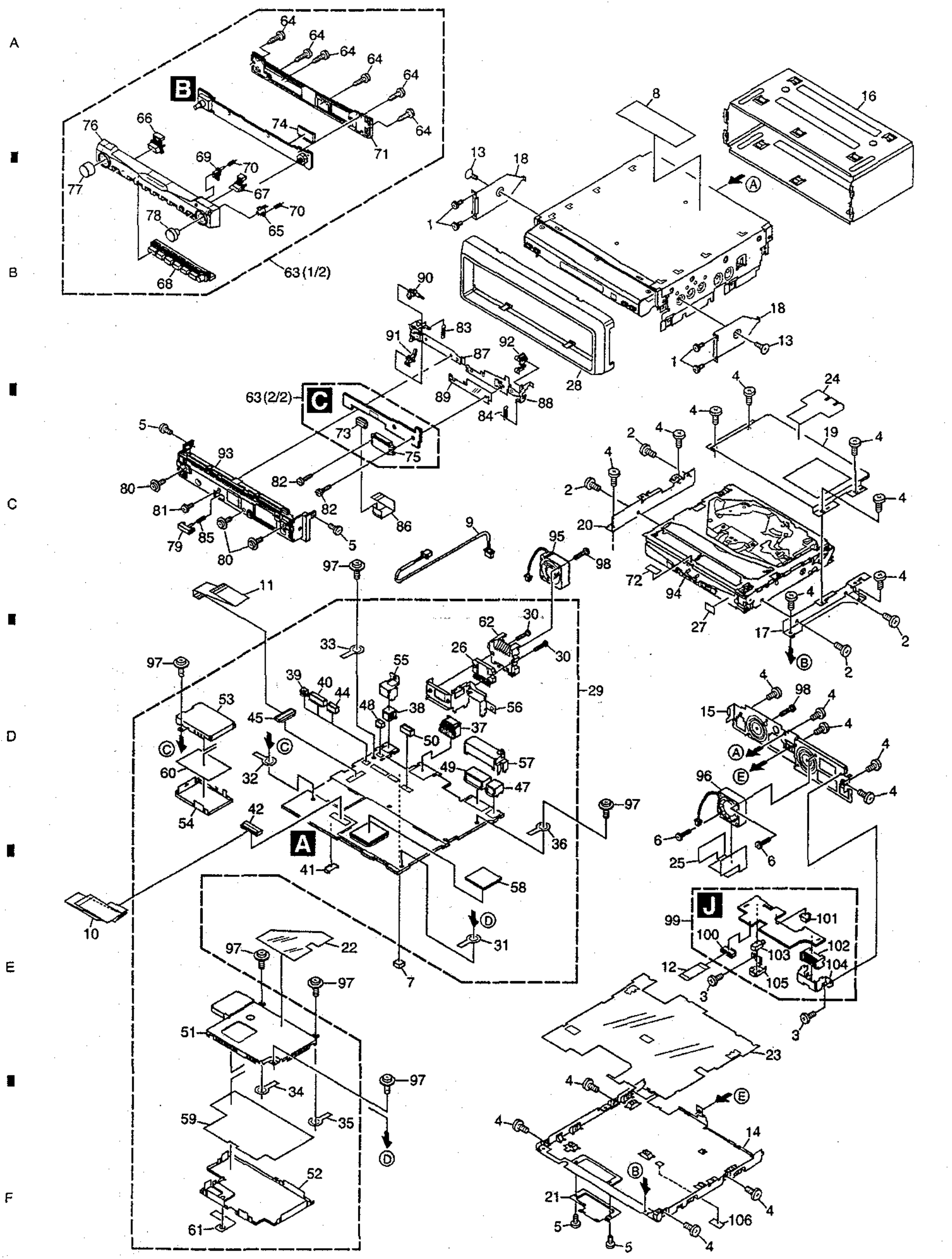
PACKING (AVIC-X1R/XU/EW) SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Air Cushioned Bag	CEG1007
	2	Polyethylene Bag	CEG-162
	3	Carton	CHG5462
	4	Contain Box	CHL5462
	5	Protector	CHP2879
	6	Protector	CHP2877
	7	Protector	CHP2876
	8	Protector	CHP2945
	9	Cord	CDE5044
	10	Cord	CDE6825
	11	Cord Assy	CDE7398
	12	Cord Assy	CDE7399
	13	Cord Assy	CDE7486
	14	Antenna Cable	CDH1325
	15	Accessory Assy	CEA3685
	16	Screw	CBA1650
	17	Bush	CNV1917
*	18	Polyethylene Bag	E36-615
	19	Screw	JGZ20P070FTC
	20	Screw Assy	CEA3686
	21	Screw	BMZ50P060FTC
	22	Screw(M4x6)	CBA1468
	23	Screw	CMZ50P060FTC
*	24	Polyethylene Sheet	CNM4338
	25	Spacer	CNM9149
	26	Accessory Assy	CEA3996
	27	Screw Assy	CEA4396
	28	Screw	CBA1795
*	29	Polyethylene Sheet	CNM4338
	30	Screw	HMF40P080FTC
*	31	Polyethylene Bag	CEG1163
	32	Angle Assy	CXC1079
	33	Sub Carton	CHG5440
	34	•••••	
	35	GPS Antenna Assy	CXC4864
	36	Water Proof Pad	CZN5442
	37	Sheet	CZN7008
	38-1	Polyethylene Bag	CEG1116
	38-2	Owner's Manual/PEE/ENG	CRB2029
	38-3	Owner's Manual/PEE/ENG	CRB2030
	38-4	Owner's Manual/PEE/SPA	CRB2031
	38-5	Owner's Manual/PEE/SPA	CRB2032
	38-6	Owner's Manual/PEE/GER	CRB2033
	38-7	Owner's Manual/PEE/GER	CRB2034
	38-8	Owner's Manual/PEE/FRE	CRB2035
	38-9	Owner's Manual/PEE/FRE	CRB2036
	38-10	Owner's Manual/PEE/ITA	CRB2037
	38-11	Owner's Manual/PEE/ITA	CRB2038
	38-12	Owner's Manual/PEE/DUT	CRB2039
	38-13	Owner's Manual/PEE/DUT	CRB2040
	38-14	Installation Manual	CRD3958
*	38-15	Passport	CRY1013
*	38-16	Warranty Card	CRY1157
	38-17	Cleaning Cloth Assy	CEA3952
	38-18	Sheet	CNM8603
*	38-19	Lock Tie	CNV-754
*	38-20	Caution Card	CRP1322
	38-21	Connector	CKX1049

● Owner's Manual, Installation Manual

Part No.	Language
CRB2029, CRB2030	English
CRB2031, CRB2032	Spanish
CRB2033, CRB2034	German
CRB2035, CRB2036	French
CRB2037, CRB2038	Italian
CRB2039, CRB2040	Dutch
CRD3958	English, Spanish, German, French, Italian, Dutch

2.3 NAVIGATION UNIT (1)

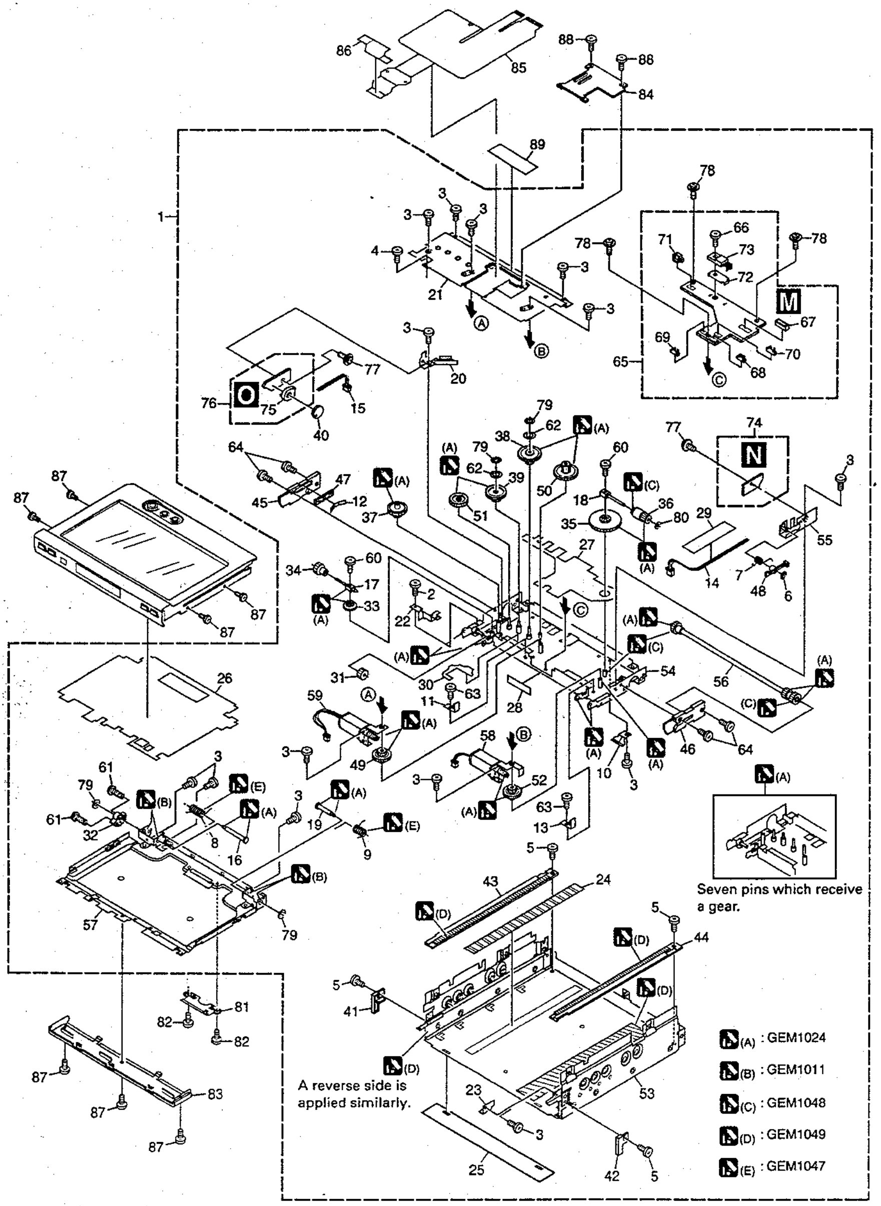


NAVIGATION UNIT (1) SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Screw	BMZ20P030FZK
	2	Screw(M2x3)	CBA1527
	3	Screw	BMZ26P025FTC
	4	Screw	BMZ26P040FTC
	5	Screw(M2x2.5)	CBA1615
	6	Screw(M2.6x12)	CBA1620
	7	Spacer	CNM9200
	8	Label(EW model)	VRW1860
	9	Cord Assy	CDE7401
	10	FFC	CDE7740
	11	FFC	CDE7403
	12	FFC	CDE7727
	13	Screw	CMZ50P060FTC
	14	Case	CNB3155
	15	Panel	CNB3048
	16	Holder	CND2812
	17	Bracket	CND2815
	18	Bracket	CND2816
	19	Bracket	CND2817
	20	Bracket	CND1947
	21	Holder	CND1948
	22	Insulator	CNM8043
	23	Insulator	CNM8571
	24	Insulator	CNM8715
	25	Cover	CNM8874
	26	IC(IC2405)	PAL007A
	27	Spacer	CNM9246
	28	Panel	CNS7797
	29	CC Unit(UC model)	CWM9948
		CC Unit(EW model)	CWM9947
	30	Screw	BMZ26P160FTC
	31	Terminal(CN100)	CKF1064
	32	Terminal(CN604)	CKF1064
	33	Terminal(CN605)	CKF1064
	34	Terminal(CN614)	CKF1064
	35	Terminal(CN615)	CKF1064
	36	Terminal(CN2601)	CKF1064
	37	Connector(CN802)	CKM1332
	38	Connector(CN2552)	CKS1940
	39	Connector(CN971)	CKS4822
	40	Connector(CN608)	CKS3751
	41	Connector(CN2701)	CKS3810
	42	Connector(CN2)	CKS4052
	43	•••••	
	44	Connector(CN609)	CKS4068
	45	Connector(CN607)	CKS4132
	46	•••••	
	47	Connector(CN692)	CKS4473
	48	Connector(CN2551)	VKN1928
	49	Connector(CN731)	CKS4646
	50	Connector(CN691)	CKS4814
	51	Shield	CND2822
	52	Shield	CND2823
	53	Shield	CND1951
	54	Shield	CND1952
	55	Holder	CND1953
	56	Holder	CND1954

Mark	No.	Description	Part No.
	57	Holder	CND1955
	58	Sheet	CNM7902
	59	Insulator	CNM8572
	60	Insulator	CNM8573
	61	Insulator	CNM8856
	62	Heat Sink	CNR1739
	63	Detach Grille Assy(UC model)	CXC4305
		Detach Grille Assy(EW model)	CXC4304
	64	Screw	BPZ20P080FZK
	65	Button(DETACH)	CAC8431
	66	Button(SRC)	CAC8432
	67	Button(EQ)	CAC8433
	68	Button	CAC8434
	69	Button(RESET)	CAC8503
	70	Spring	CBH2680
	71	Cover	CNS7759
	72	Sheet	CNM9576
	73	Connector(CN5901)	CKS3965
	74	Connector(CN5501)	CKS4657
	75	Connector(CN5902)	CKS4658
	76	Sub Grille Unit(UC model)	CXC4636
		Sub Grille Unit(EW model)	CXC4635
	77	Knob Unit(VOLUME)	CXC4641
	78	Knob Unit(SELECT)	CXC4642
	79	Button	CAC9276
	80	Screw(M2x4)	CBA1734
	81	Screw(M2.6x2.5)	CBA1777
	82	Screw(M2x4)	CBA1778
	83	Spring	CBH2681
	84	Spring	CBH2682
	85	Spring	CBH2790
	86	FFC	CDE7405
	87	Holder	CND1840
	88	Holder	CND1841
	89	Insulator	CNM8510
	90	Arm	CNV8571
	91	Arm	CNV8572
	92	Arm	CNV8573
	93	Panel Unit	CXC2693
	94	DVD Mechanism Module(MS3)	CXK6325
	95	Fan Motor(M100)	CXM1284
	96	Fan Motor(M101)	CXM1289
	97	Screw	ISS26P050FTC
	98	Screw	PMZ20P160FTC
	99	Mother Tuner Unit(UC model)	CWM9946
		Mother Tuner Unit(EW model)	CWM9945
	100	Connector(CN2801)	CKS4871
	101	Connector(CN2802)	CKS4822
	102	Connector(CN2803)	CKM1365
	103	Connector(CN2804)	CKS4752
	104	Holder	CND1956
	105	Holder	CND2824
	106	Sheet	CNM9536

2.4 NAVIGATION UNIT (2)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Seven pins which receive a gear.

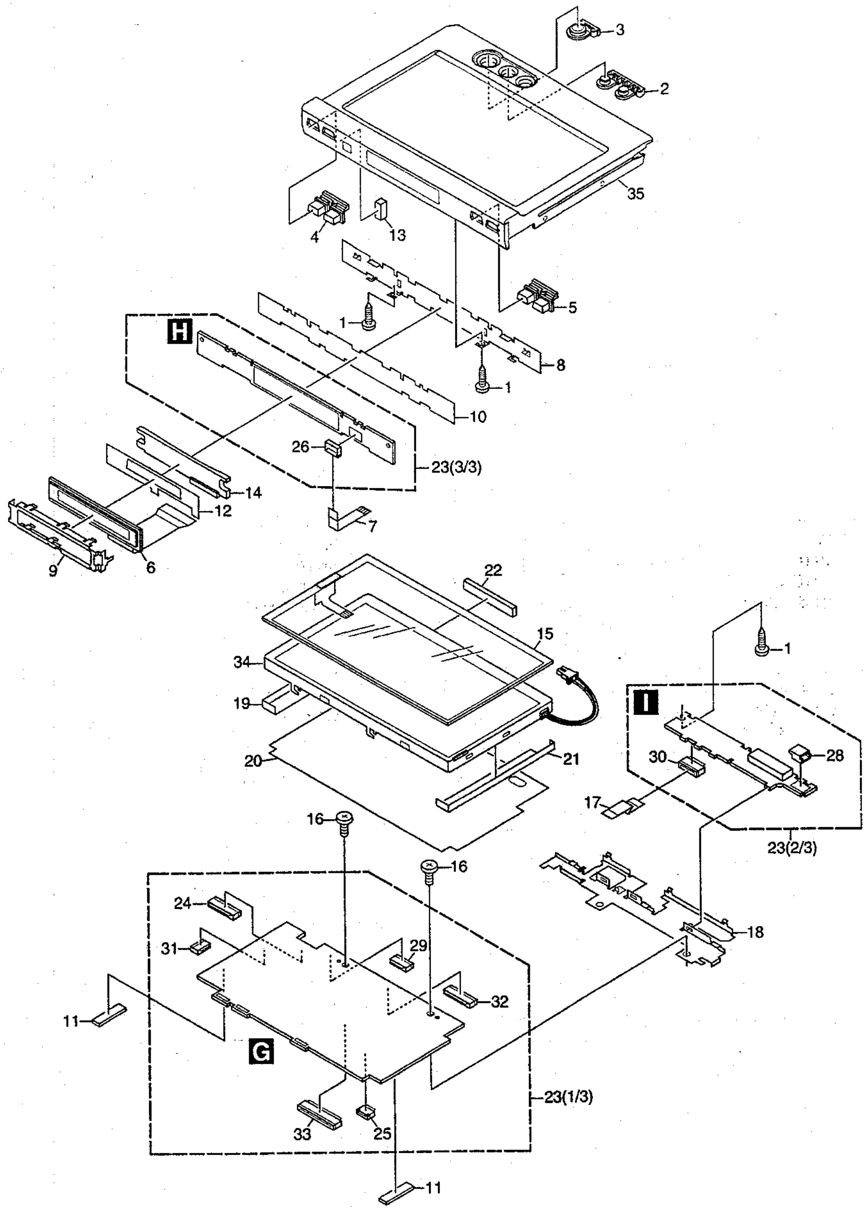
A reverse side is applied similarly.

(A) : GEM1024
(B) : GEM1011
(C) : GEM1048
(D) : GEM1049
(E) : GEM1047

NAVIGATION UNIT (2) SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Drive Unit	CXB9508
	2	Screw(M2x3)	CBA1082
	3	Screw(M2x2.5)	CBA1250
	4	Screw(M2x4)	CBA1277
	5	Screw(M2x1.5)	CBA1615
	6	Washer	CBF1038
	7	Spring	CBH2645
	8	Spring	CBH2646
	9	Spring	CBH2647
	10	Spring	CBL1585
	11	Spring	CBL1586
	12	Spring	CBL1587
	13	Spring	CBL1642
	14	Cord Assy	CDE7047
	15	Cord Assy	CDE7213
	16	Shaft	CLA4270
	17	Shaft	CLA4305
	18	Shaft	CLA4306
	19	Shaft	CLA4309
	20	Bracket	CND1221
	21	Case	CND1229
	22	Holder	CND1318
	23	Holder	CND1449
	24	Sheet	CNM8522
	25	Sheet	CNM8037
	26	Insulator	CNM8048
	27	Insulator	CNM8158
	28	Sheet	CNM8159
	29	Tape	CNM8160
	30	Insulator	CNM8294
	31	Gear	CNR1664
	32	Gear	CNR1665
	33	Gear	CNR1677
	34	Gear	CNR1678
	35	Gear	CNR1679
	36	Gear	CNR1680
	37	Gear	CNR1688
	38	Gear	CNR1708
	39	Gear	CNR1709
	40	Gear	CNV7383
	41	Holder	CNV7384
	42	Holder	CNV7385
	43	Rack	CNV7386
	44	Rack	CNV7387
	45	Slider	CNV7388
	46	Slider	CNV7389
	47	Holder	CNV7390
	48	Arm	CNV7391
	49	Gear	CNV7522
	50	Gear	CNV7523
	51	Gear	CNV7524
	52	Gear	CNV7529
	53	Chassis Unit	CXB9509
	54	Frame Unit	CXB9511
	55	Holder Unit	CXB9512
	56	Shaft Unit	CXB9513
	57	Holder Unit	CXB9514
	58	Motor Unit(M3001)(Position)	CXB9515
	59	Motor Unit(M3002)(Angle)	CXB9516
	60	Screw	CZB3082
	61	Screw	CZB3083
	62	Washer	CZB3084
	63	Screw(M2x1.8)	CZB3085
	64	Screw(M2x4)	CZB3088
	65	Main Unit	CZW3087
	66	Screw	BMZ26P050FTC
	67	Connector(CN3801)	CKS4068
	68	Connector(CN3802)	CKS4732
	69	Connector(CN3803)	CKS4732
	70	Connector(CN3807)	CKS4733
	71	Connector(CN3809)	CKS4733
	72	Heat Sink	CND1228
	73	IC(IC3801)	BA00AST
	74	SW Unit	CZW3088
	75	Volume(VR3841)	CCW1025
	76	Volume Unit	CZW3089
	77	Screw	IMS20P020FTC
	78	Screw	IMS20P030FZK
	79	Washer	YE15S
	80	Washer	CZB3089
	81	Holder	CND2813
	82	Screw	JFZ20P022FNI
	83	Cover	CNS7760
	84	Holder	CNV8569
	85	Flexible PCB	CNP7621
	86	Shield	CNM8969
	87	Screw(M2x2)	CBA1753
	88	Screw(M2x3)	CBA1797
	89	Sheet	CNM9201

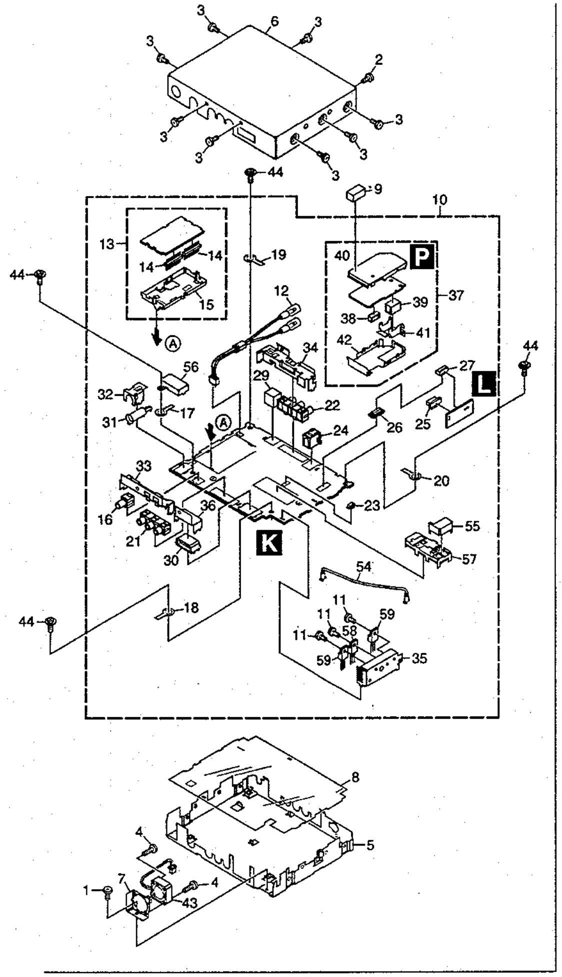
2.5 NAVIGATION UNIT (3)



NAVIGATION UNIT (3) SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Screw	BPZ20P060FTC
	2	Button(NAVI/AV)	CAC8427
	3	Button(NAVI MENU)	CAC8428
	4	Button(OPEN/CLOSE)	CAC8430
	5	Button(DISP,PGM)(UC model)	CAC8504
		Button(DISP,TA)(EW model)	CAC8429
	6	LCD	CAW1870
	7	FFC	CDE7488
	8	Holder	CND2010
	9	Holder	CND2825
	10	Insulator	CNM8616
	11	Spacer	CNM8707
	12	Sheet	CNM8858
	13	Cushion	CNM9148
	14	Lighting Conductor	CNV8570
	15	Touch Panel	CSX1083
	16	Screw(M2x2.5)	CBA1615
	17	FFC	CDE7196
	18	Holder	CND2418
	19	Sheet	CNM7784
	20	Insulator	CNM8031
	21	Sheet	CNM8265
	22	Conductor	CNM8857
	23	Monitor Unit(UC model)	CWM9950
		Monitor Unit(EW model)	CWM9949
	24	Connector(CN4801)	CKS3991
	25	Connector(CN4005)	CKS4054
	26	Connector(CN4301)	CKS4054
	27	•••••	
	28	Connector(CN5002)	CKS4428
	29	Connector(CN4003)	CKS4595
	30	Connector(CN5001)	CKS4595
	31	Connector(CN4681)	CKS4675
	32	Connector(CN4002)	CKS4793
	33	Connector(CN4701)	CKS4818
	34	LCD Panel	CWX3056
	35	Display Sub Grille Unit(UC model)	CXC4634
		Display Sub Grille Unit(EW model)	CXC4633

2.6 HIDEAWAY UNIT AND CORD ASSY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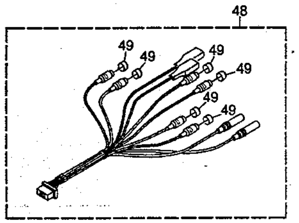
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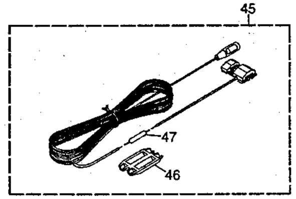

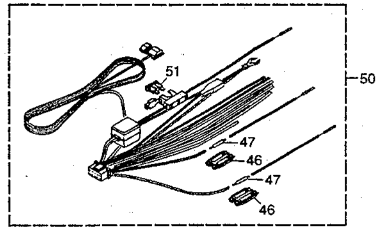
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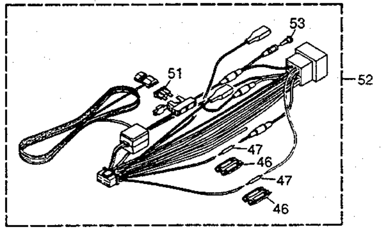
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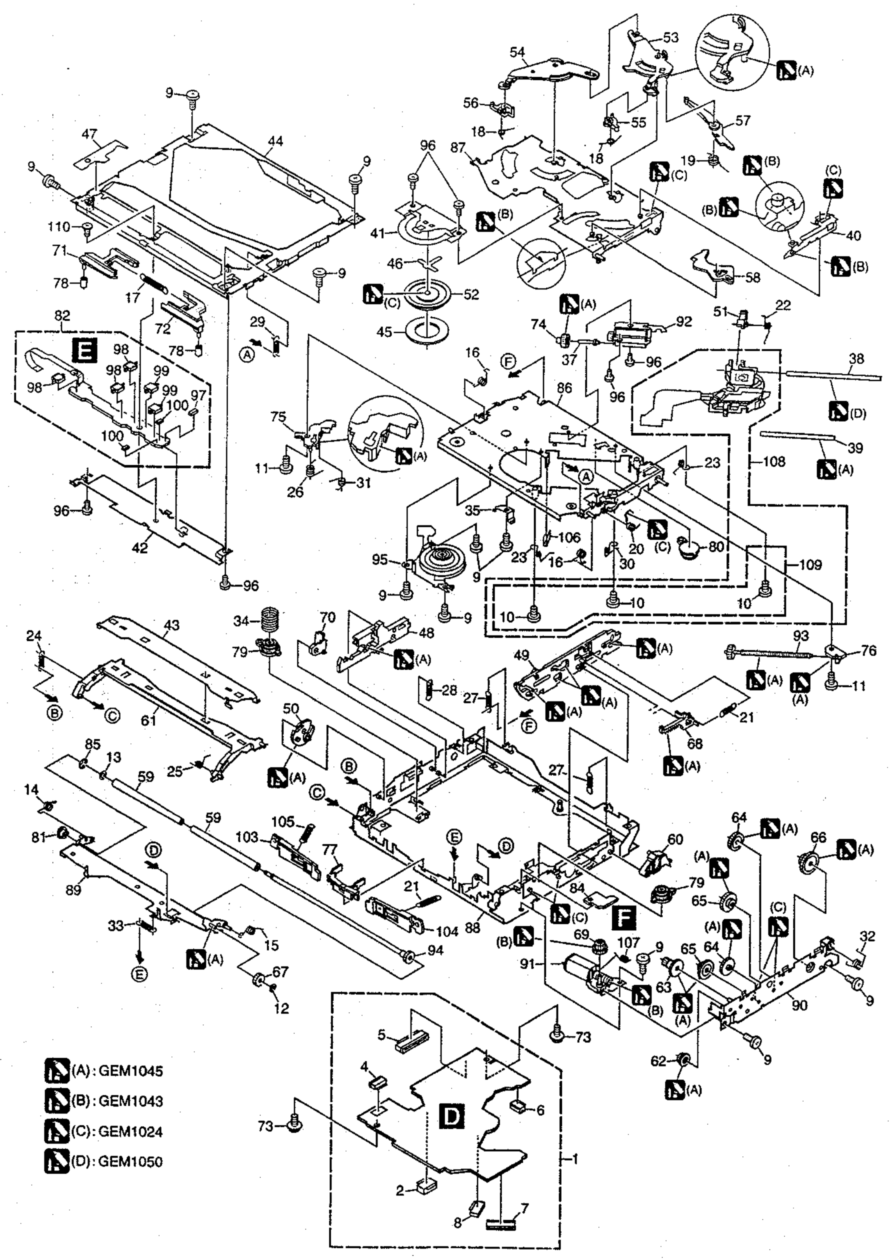
HIDEAWAY UNIT AND CORD ASSY SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Screw	BMZ26P030FTC
	2	Screw	BMZ26P060FZK
	3	Screw	BSZ26P060FTC
	4	Screw(M2.6x12)	CBA1620
	5	Chassis	CNA2697
	6	Case(UC model)	CNB3154
		Case(EW model)	CNB3153
	7	Holder	CND2821
	8	Insulator	CNM8565
	9	Gasket	CNM8954
	10	Mother Tuner Unit(UC model)	CWM9946
		Mother Tuner Unit(EW model)	CWM9945
	11	Screw	BMZ26P060FTC
	12	Cord Assy	CDE7397
	13	FM/AM Tuner Unit(UC model)	CWE1651
		FM/AM Tuner Unit(EW model)	CWE1650
	14	Connector(CN101,102)	CKS4653
	15	Holder	CND1432
	16	Pin Jack(CN1351)	CKB1065
	17	Terminal(CN1401)	CKF1064
	18	Terminal(CN1403)	CKF1064
	19	Terminal(CN1903)	CKF1064
	20	Terminal(CN1904)	CKF1064
	21	Pin Jack(CN1301)	CKB1071
	22	Pin Jack(CN1701)	CKB1071
	23	Connector(CN1950)	CKS4822
	24	Connector(CN1101)	CKS3414
	25	Connector(CN551)	CKS5205
	26	Connector(CN1841)	CKS5205
	27	Connector(CN552)	CKS5204
	28	•••••	
	29	Connector(CN1201)	CKS4590
	30	Connector(CN1001)	CKS4646
	31	Antenna Jack(CN1402)	CKX1056
	32	Holder	CND2818
	33	Holder	CND1901
	34	Holder	CND1902
	35	Holder	CND2819
	36	Holder	CND2820
	37	GPS Unit(UC model)	CWX2960
		GPS Unit(EW model)	CWX2929
	38	Connector(CN461)	CKS4280
	39	Connector(CN504)	CKS4432
	40	Shield	CNC9192
	41	Holder	CNC9252
	42	Shield	CND1161
	43	Fan Motor(M102)	CXM1293
	44	Screw	ISS26P060FTC
	45	Cord	CDE6825
	46	Cap	CNS1472
	47	Resistor	RS1/2PMF102J
	48	Cord Assy	CDE7399
	49	Cap	CNV6727
	50	Cord Assy(UC model)	CDE7487
⚠	51	Fuse(10A)	CEK1136
	52	Cord Assy(EW model)	CDE7486
	53	Cap(EW model)	CKX-003
	54	Cord(EW model)	CDH1332
	55	Shield(EW model)	CND2814
	56	Shield(EW model)	CND1964
	57	Tuner Unit(Y1801)(EW model)	CWE1674
	58	Transistor(Q1907)	2SB1629
	59	Transistor(Q1908,1909)	2SD2396

2.7 DVD MECHANISM MODULE

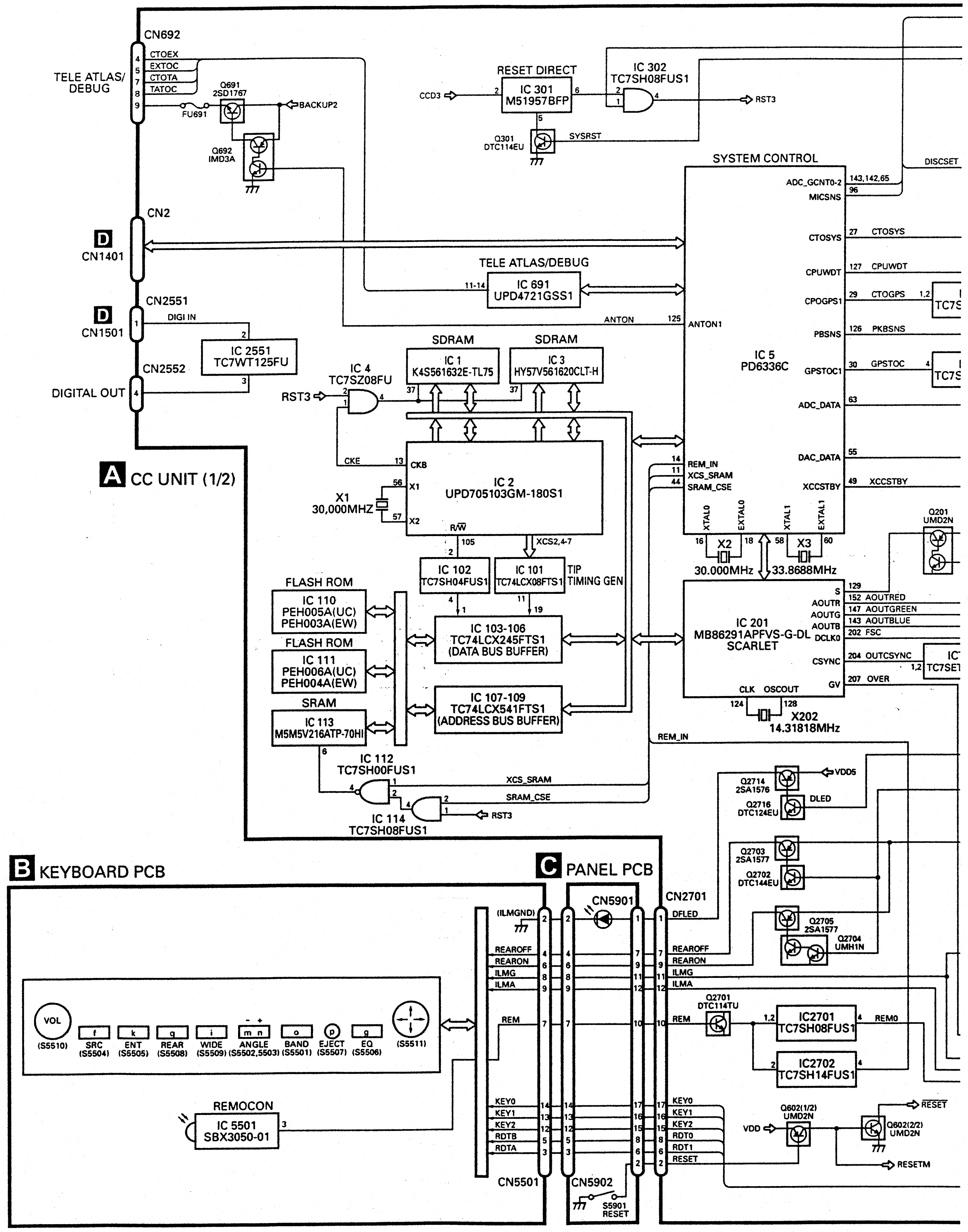


DVD MECHANISM MODULE SECTION PARTS LIST

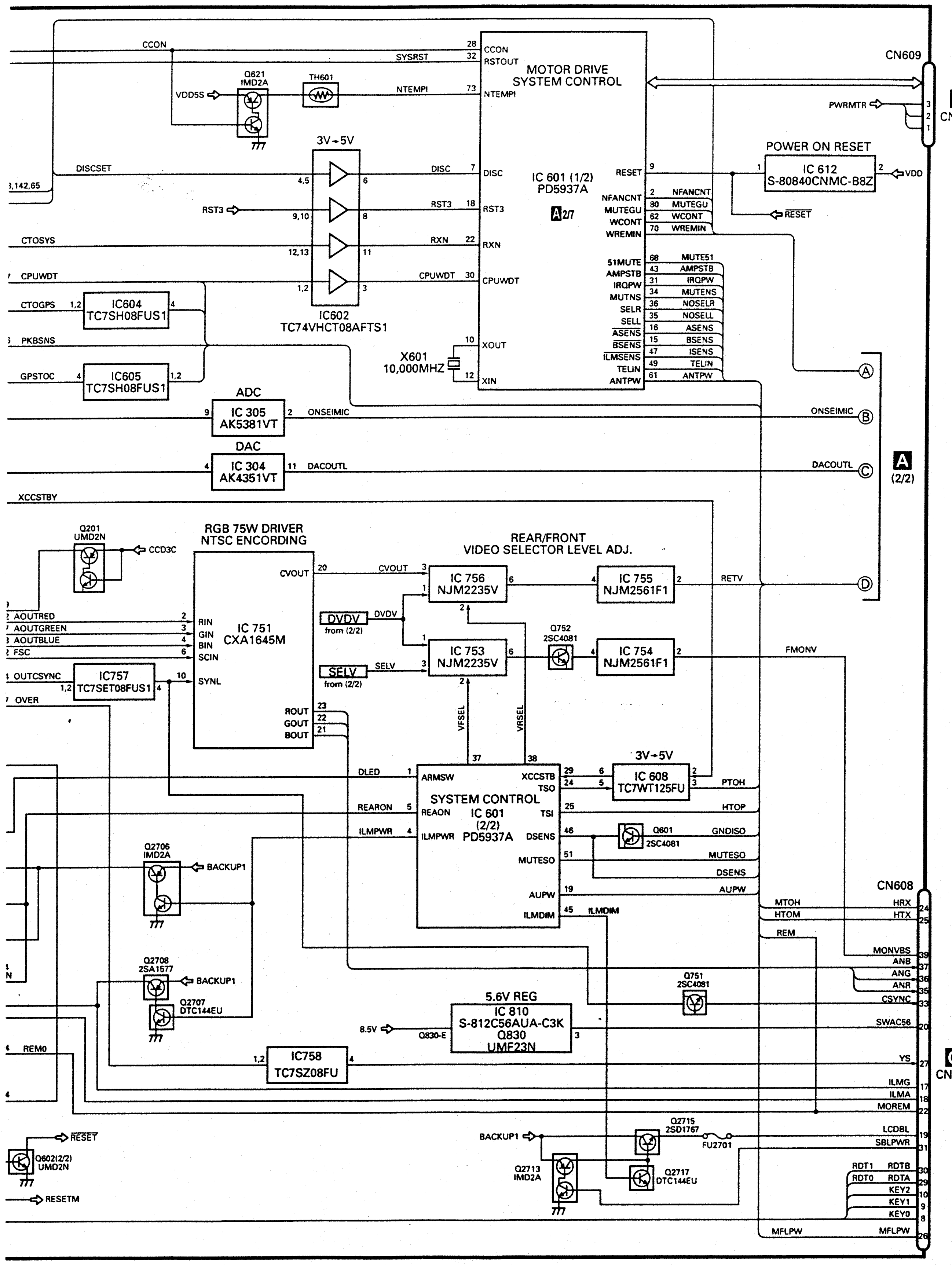
Mark	No.	Description	Part No.
	1	DVD Core Unit(MS3)	CWX2941
	2	Connector(CN1501)	CKS4282
	3	Connector(CN1401)	CKS4052
	4	Connector(CN1202)	CKS4624
	5	Connector(CN1611)	CKS4052
	6	Connector(CN1603)	CKS4374
	7	Connector(CN1101)	CKS4625
	8	Connector(CN1201)	CKS4067
	9	Screw	BMZ20P020FTC
	10	Screw(M2 x 3.5)	CBA1571
	11	Screw(M2 x 2.5)	CBA1623
	12	Washer	CBF1038
	13	Washer	CBF1064
	14	Spring	CBH2586
	15	Spring	CBH2587
	16	Spring	CBH2588
	17	Spring	CBH2589
	18	Spring	CBH2590
	19	Spring	CBH2591
	20	Spring	CBH2592
	21	Spring	CBH2593
	22	Spring	CBH2594
	23	Spring	CBH2595
	24	Spring	CBH2596
	25	Spring	CBH2597
	26	Spring	CBH2598
	27	Spring	CBH2599
	28	Spring	CBH2600
	29	Spring	CBH2601
	30	Spring	CBH2602
	31	Spring	CBH2603
	32	Spring	CBH2604
	33	Spring	CBH2605
	34	Spring	CBH2711
	35	Spring	CBL1564
	36	•••••	
	37	Shaft	CLA3881
	38	Shaft	CLA4206
	39	Shaft	CLA4207
	40	Lever	CNC9933
	41	Holder	CNC9939
	42	Holder	CND2251
	43	Holder	CNC9941
	44	Frame	CND2250
	45	Sheet	CNM6883
	46	Sheet	CNM8283
	47	Sheet	CNM8643
	48	Lever	CNV8076
	49	Lever	CNV7155
	50	Cam	CNV7156
	51	Rack	CNV7157
	52	Clamper	CNV7158
	53	Arm	CNV7159
	54	Arm	CNV7160
	55	Arm	CNV7161
	56	Arm	CNV7162
	57	Arm	CNV7163
	58	Arm	CNV7164
	59	Roller	CNV7165
	60	Arm	CNV7166
	61	Guide	CNV8093
	62	Gear	CNV7169
	63	Gear	CNV7170
	64	Gear	CNV7171
	65	Gear(Black)	CNV7172
	66	Gear	CNV7173
	67	Gear	CNV7174
	68	Rack	CNV7175
	69	Gear	CNV7176
	70	Arm	CNV8077
	71	Lever	CNV7178
	72	Lever	CNV7179
	73	Screw	IMS20P030FTC
	74	Gear	CNV7181
	75	Holder	CNV7183
	76	Holder	CNV7184
	77	Guide	CNV7745
	78	Roller	CNV7344
	79	Damper	CNV7470
	80	Damper	CNV7471
	81	Collar	CNV7645
	82	Compound Unit(A)	CWX3154
	83	•••••	
	84	Compound Unit(B)	CWX3156
	85	Washer	YE20FTC
	86	Chassis Unit	CXC3629
	87	Arm Unit	CXB8681
	88	Frame Unit	CXB8683
	89	Arm Unit	CXC4701
	90	Bracket Unit	CXB8685
	91	Motor Unit(LOADING)(M1)	CXC4659
	92	Motor Unit(CARRIAGE)(M2)	CXC4314
	93	Screw Unit	CXB8689
	94	Roller Unit	CXB8690
	95	Motor(SPINDLE)(M3)	CXM1308
	96	Screw	JFZ20P018FTC
	97	Photo-transistor(Q1299)	CPT231SCTD
	98	Spring Switch(S1201,1202,1203)	CSN1069
	99	Spring Switch(S1204,1205)	CSN1070
	100	Resistor(R1298,1299)	RS1/16S0R0J
	101	•••••	
	102	•••••	
	103	Arm	CNV7742
	104	Arm	CNV7743
	105	Spring	CBH2710
	106	Spring	CBL1643
	107	Spring	CBH2712
	108	Pickup Unit(Service)(Screw)	GXX1234
	109	Screw Assy	CXX1750
	110	Screw(M1.4 x 1.4)	CBA1787

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

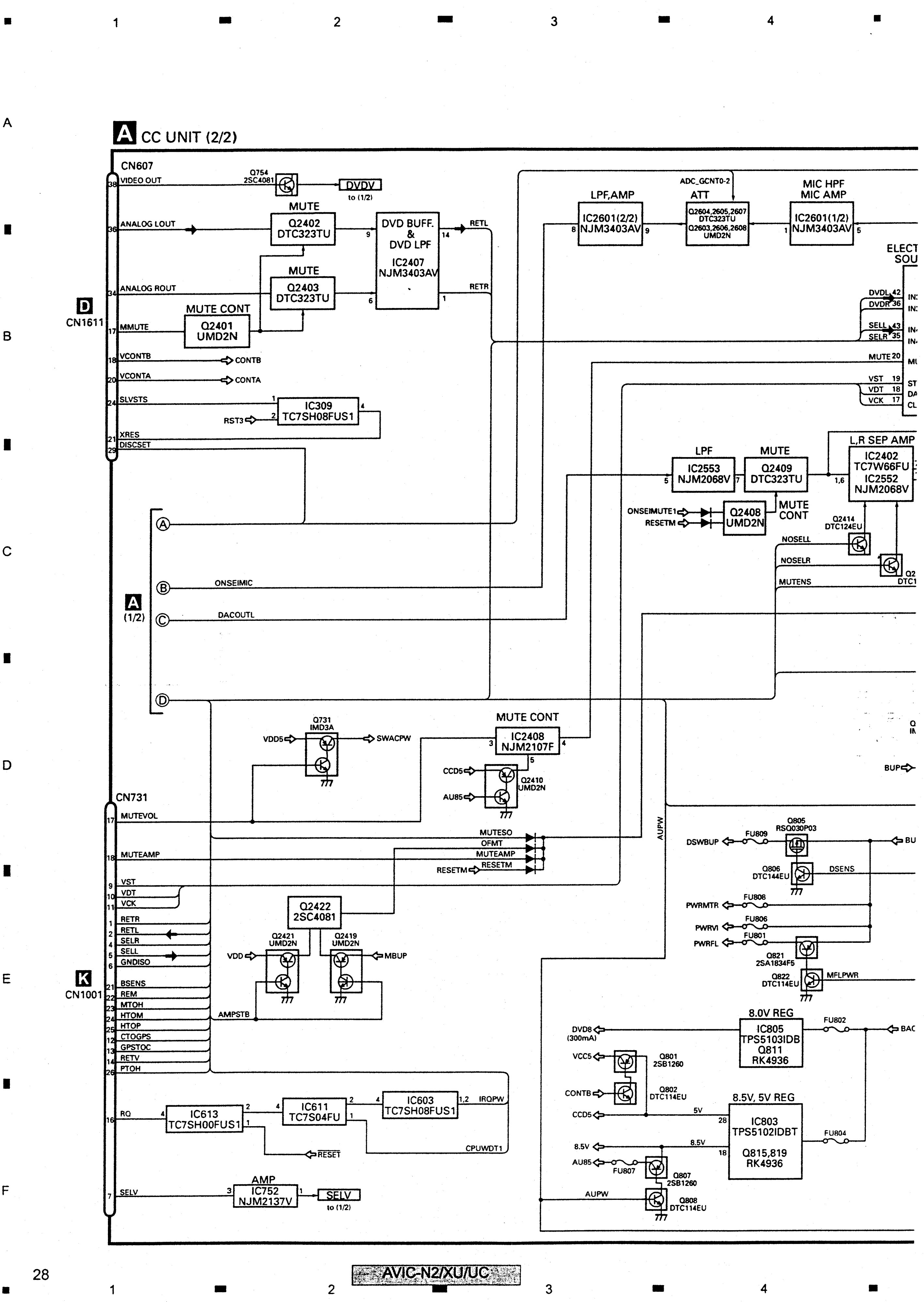
3.1 BLOCK DIAGRAM

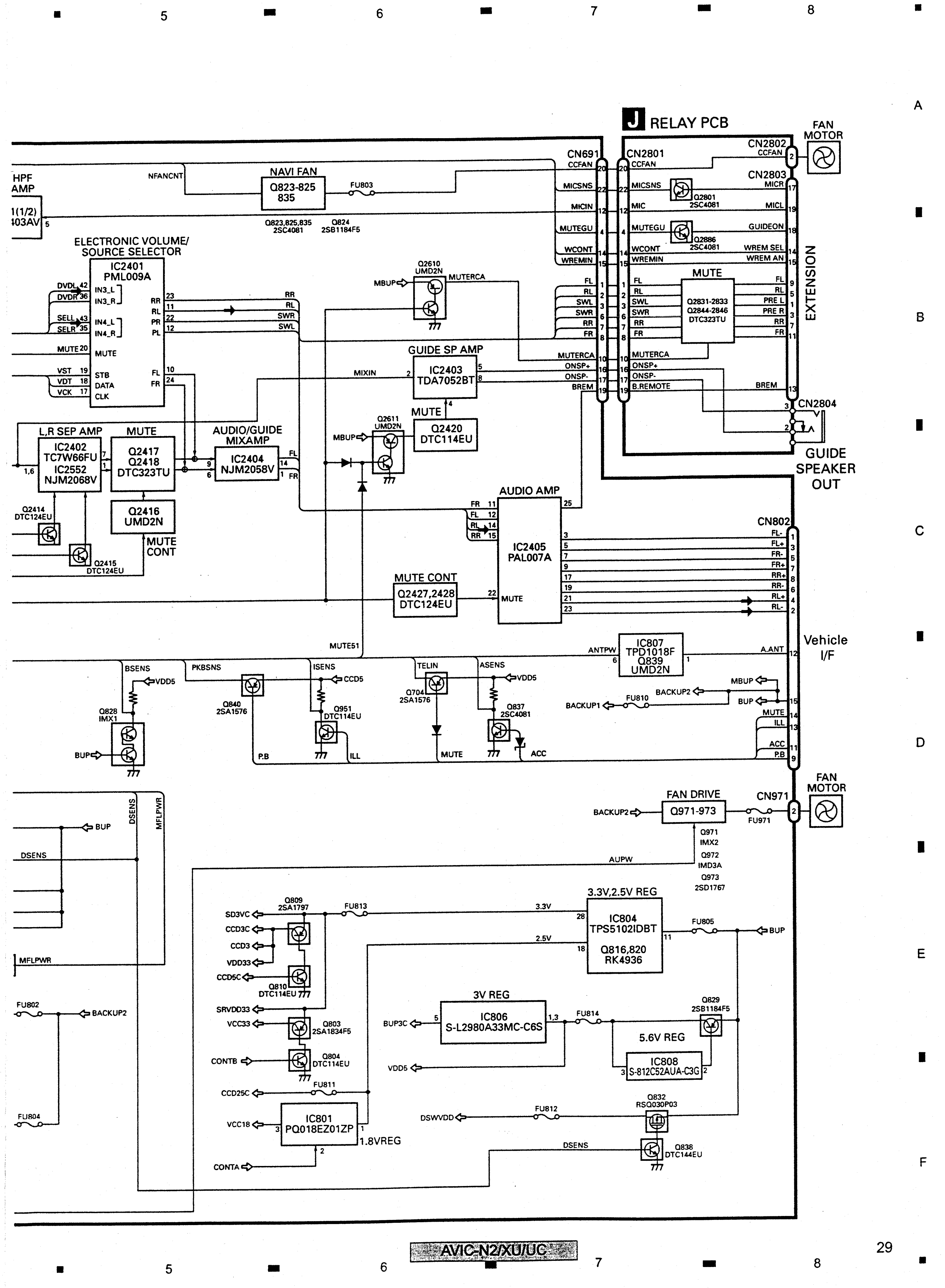


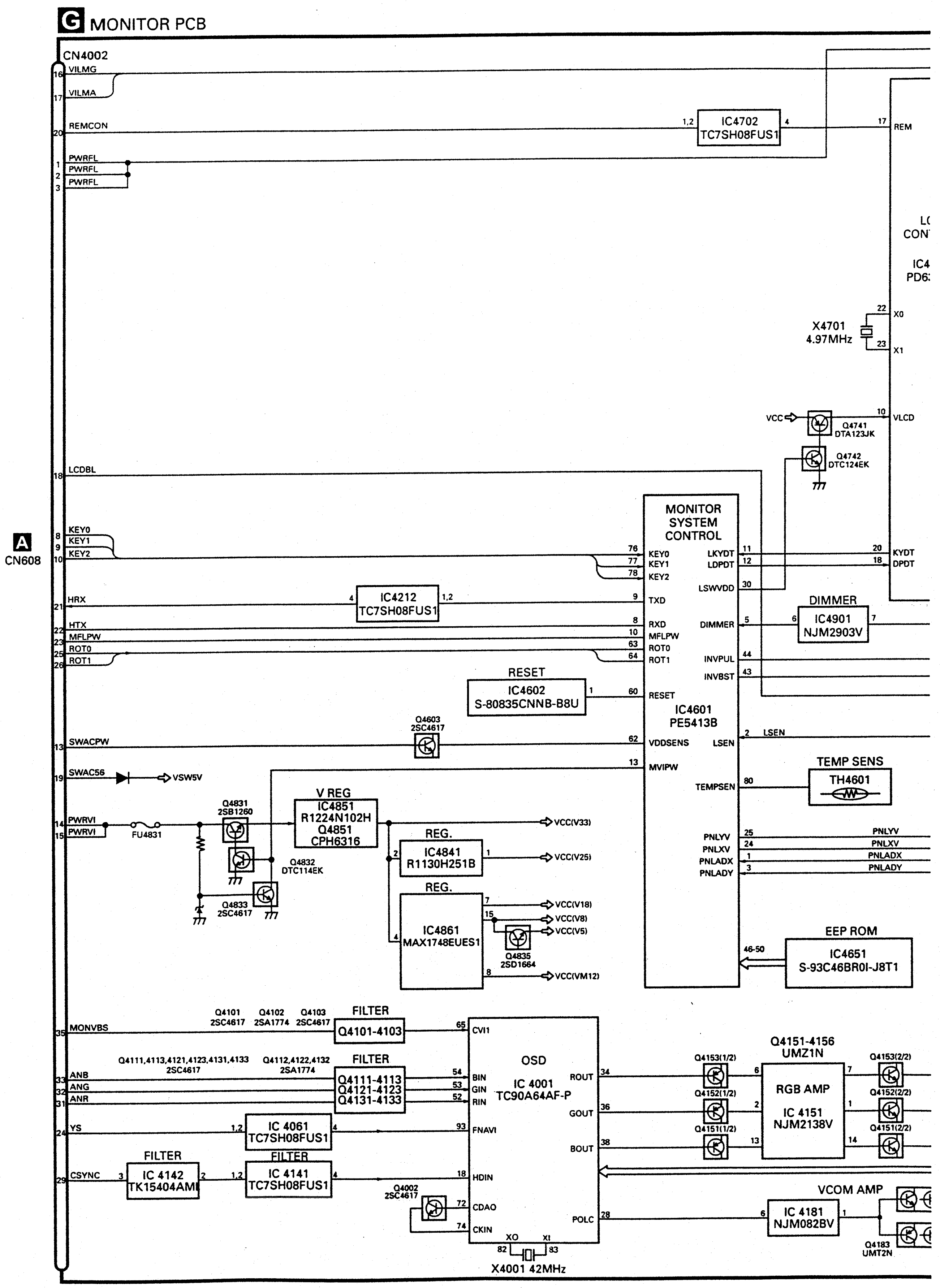
A CC UNIT (1/2)
CN692
TELE ATLAS/ DEBUG
CTOEX
EXTOC
CTOTA
TATOC
Q691 2SD1767
FU691
BACKUP2
Q692 IMD3A
CN2
D CN1401
CN2551
D CN1501
DIGI IN
CN2552
DIGITAL OUT
IC 2551 TC7WT125FU
RESET DIRECT
IC 301 M51957BFP
CCD3
Q301 DTC114EU
SYSRST
IC 302 TC7SH08FUS1
RST3
SYSTEM CONTROL
IC 5 PD6336C
ADC_GCNT0-2
MICSNS
CTOSYS
CPUWDT
CPOGPS1
PBSNS
GPSTOC1
ADC_DATA
DAC_DATA
XCCSTBY
ANTON1
REM_IN
XCS_SRAM
SRAM_CSE
DISCSET
CTOGPS
PKBSNS
GPSTOC
TELE ATLAS/DEBUG
IC 691 UPD4721GSS1
ANTON
SDRAM
IC 1 K4S561632E-TL75
SDRAM
IC 3 HY57V561620CLT-H
IC 4 TC7SZ08FU
IC 2 UPD705103GM-180S1
CKE
X1 30,000MHZ
IC 102 TC7SH04FUS1
IC 101 TC74LCX08FTS1
TIP TIMING GEN
XCS2,4-7
FLASH ROM
IC 110 PEH005A(UC) PEH003A(EW)
FLASH ROM
IC 111 PEH006A(UC) PEH004A(EW)
SRAM
IC 113 M5M5V216ATP-70HI
IC 103-106 TC74LCX245FTS1 (DATA BUS BUFFER)
IC 107-109 TC74LCX541FTS1 (ADDRESS BUS BUFFER)
IC 112 TC7SH00FUS1
IC 114 TC7SH08FUS1
X2 30.000MHz
X3 33.8688MHz
IC 201 MB86291APFVS-G-DL SCARLET
AOUTR
AOUTG
AOUTB
DCLKO
CSYNC
GV
AOUTRED
AOUTGREEN
AOUTBLUE
FSC
OUTCSYNC
OVER
CLK
OSCOUT
X202 14.31818MHz
REM_IN
Q201 UMD2N
Q2714 2SA1576
VDD5
Q2716 DTC124EU
DLED
Q2703 2SA1577
Q2702 DTC144EU
Q2705 2SA1577
Q2704 UMH1N
B KEYBOARD PCB
VOL (S5510)
SRC (S5504)
ENT (S5505)
REAR (S5508)
WIDE (S5509)
ANGLE (S5502,5503)
BAND (S5501)
EJECT (S5507)
EQ (S5506)
(S5511)
REMOCON
IC 5501 SBX3050-01
CN5501
(ILMGND)
REAROFF
REARON
ILMG
ILMA
REM
KEY0
KEY1
KEY2
RDTB
RDTA
C PANEL PCB
CN5901
CN5902
S5901 RESET
CN2701
DFLED
REAROFF
REARON
ILMG
ILMA
REM
Q2701 DTC114TU
IC2701 TC7SH08FUS1
REMO
IC2702 TC7SH14FUS1
KEY0
KEY1
KEY2
RDT0
RDT1
RESET
VDD
Q602(1/2) UMD2N
Q602(2/2) UMD2N
RESETM

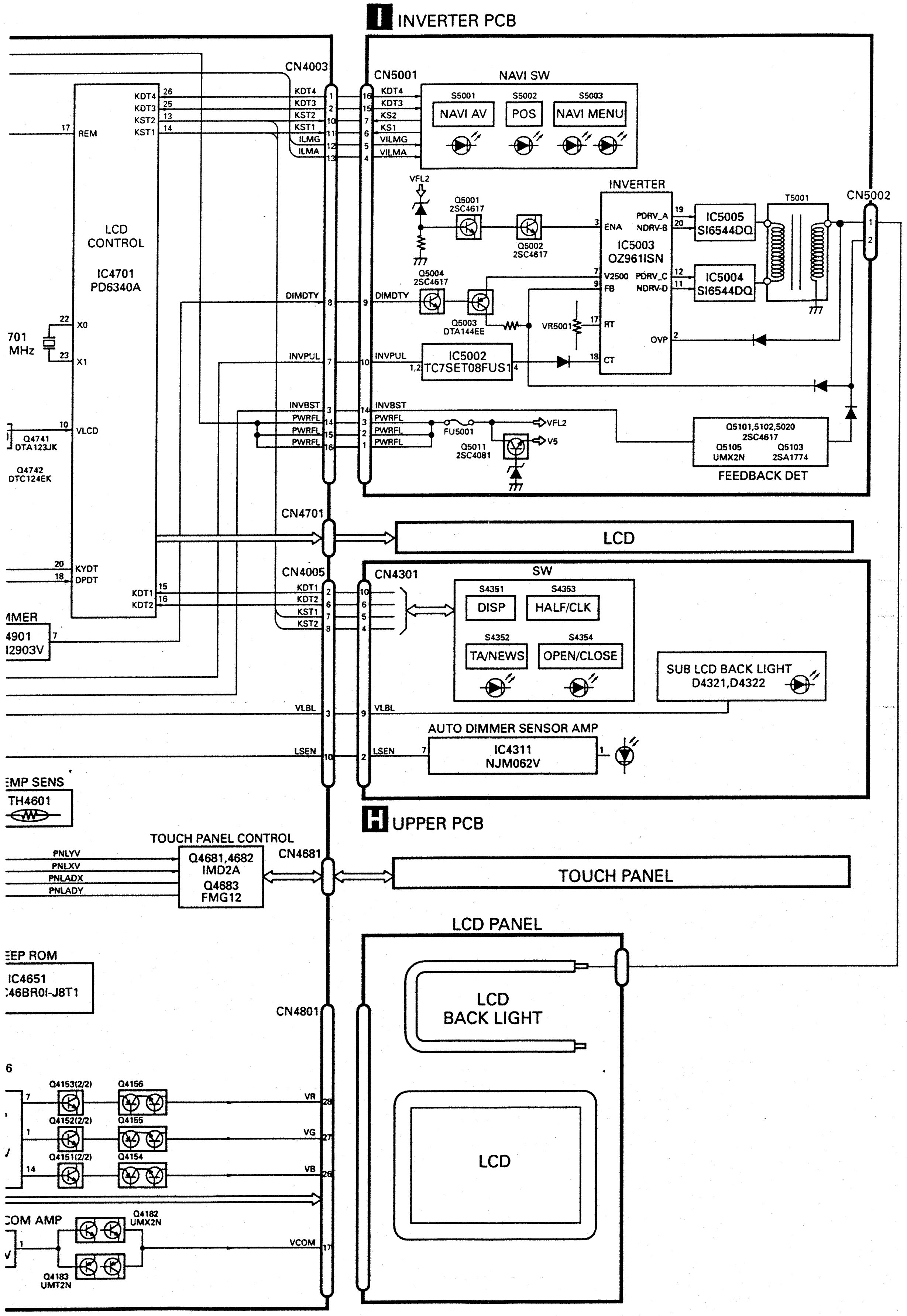


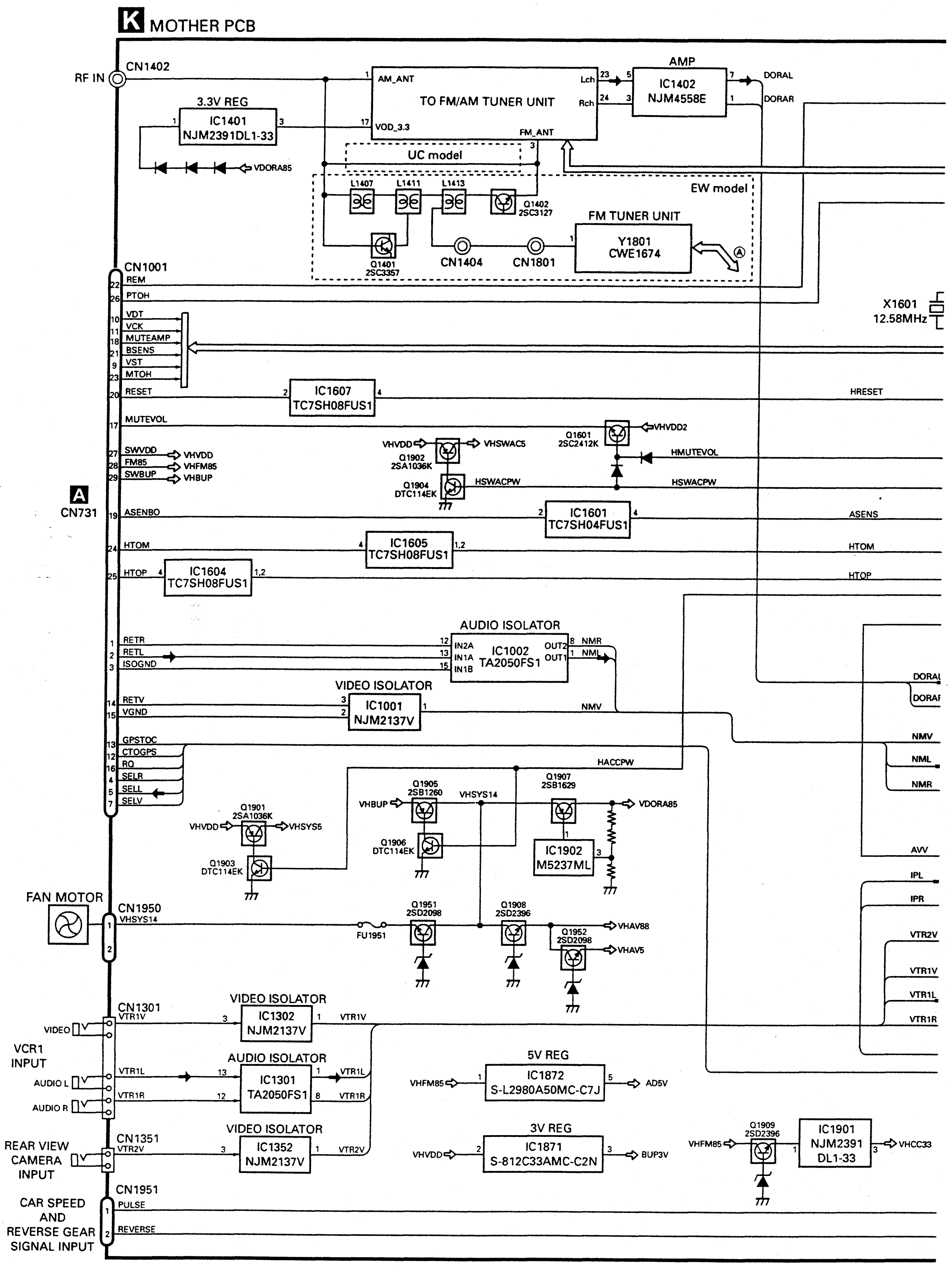
CCON
SYSRST
Q621 IMD2A
TH601
VDD5S
NTEMPI
MOTOR DRIVE SYSTEM CONTROL
IC 601 (1/2) PD5937A
A 2/7
RSTOUT
CN609
M CN3801
PWRMTR
POWER ON RESET
IC 612 S-80840CNMC-B8Z
VDD
RESET
DISCSET
3V→5V
IC602 TC74VHCT08AFTS1
RST3
CTOSYS
CPUWDT
CTOGPS
IC604 TC7SH08FUS1
PKBSNS
GPSTOC
IC605 TC7SH08FUS1
DISC
RXN
XOUT
XIN
X601 10,000MHZ
NFANCNT
MUTEGU
WCONT
WREMIN
51MUTE
AMPSTB
IRQPW
MUTNS
SELR
SELL
ASENS
BSENS
ILMSENS
TELIN
ANTPW
MUTES1
MUTENS
NOSELR
NOSELL
ISENS
ANTPW
ADC
IC 305 AK5381VT
ONSEIMIC
DAC
IC 304 AK4351VT
DACOUTL
A (2/2)
XCCSTBY
Q201 UMD2N
CCD3C
RGB 75W DRIVER NTSC ENCORDING
IC 751 CXA1645M
CVOUT
RIN
GIN
BIN
SCIN
SYNL
ROUT
GOUT
BOUT
AOUTRED
AOUTGREEN
AOUTBLUE
FSC
OUTCSYNC
IC757 TC7SET08FUS1
OVER
REAR/FRONT VIDEO SELECTOR LEVEL ADJ.
IC 756 NJM2235V
IC 755 NJM2561F1
RETV
DVDV from (2/2)
SELV from (2/2)
IC 753 NJM2235V
Q752 2SC4081
IC 754 NJM2561F1
FMONV
VFSEL
VRSEL
3V→5V
IC 608 TC7WT125FU
PTOH
DLED
REARON
ILMPWR
SYSTEM CONTROL
IC 601 (2/2) PD5937A
ARMSW
XCCSTB
TSO
TSI
DSENS
MUTESO
AUPW
ILMDIM
HTOP
Q601 2SC4081
GNDISO
MUTESO
DSENS
AUPW
Q2706 IMD2A
BACKUP1
Q2708 2SA1577
Q2707 DTC144EU
5.6V REG
IC 810 S-812C56AUA-C3K
Q830 UMF23N
8.5V
Q830-E
Q751 2SC4081
REMO
IC758 TC7SZ08FU
CN608
MTOH
HTOM
REM
HRX
HTX
MONVBS
ANB
ANG
ANR
CSYNC
SWAC56
YS
G CN4002
ILMG
ILMA
MOREM
Q2715 2SD1767
FU2701
LCDBL
SBLPWR
RESET
Q602(2/2) UMD2N
RESETM
Q2713 IMD2A
Q2717 DTC144EU
RDT1
RDT0
RDTB
RDTA
KEY2
KEY1
KEY0
MFLPW

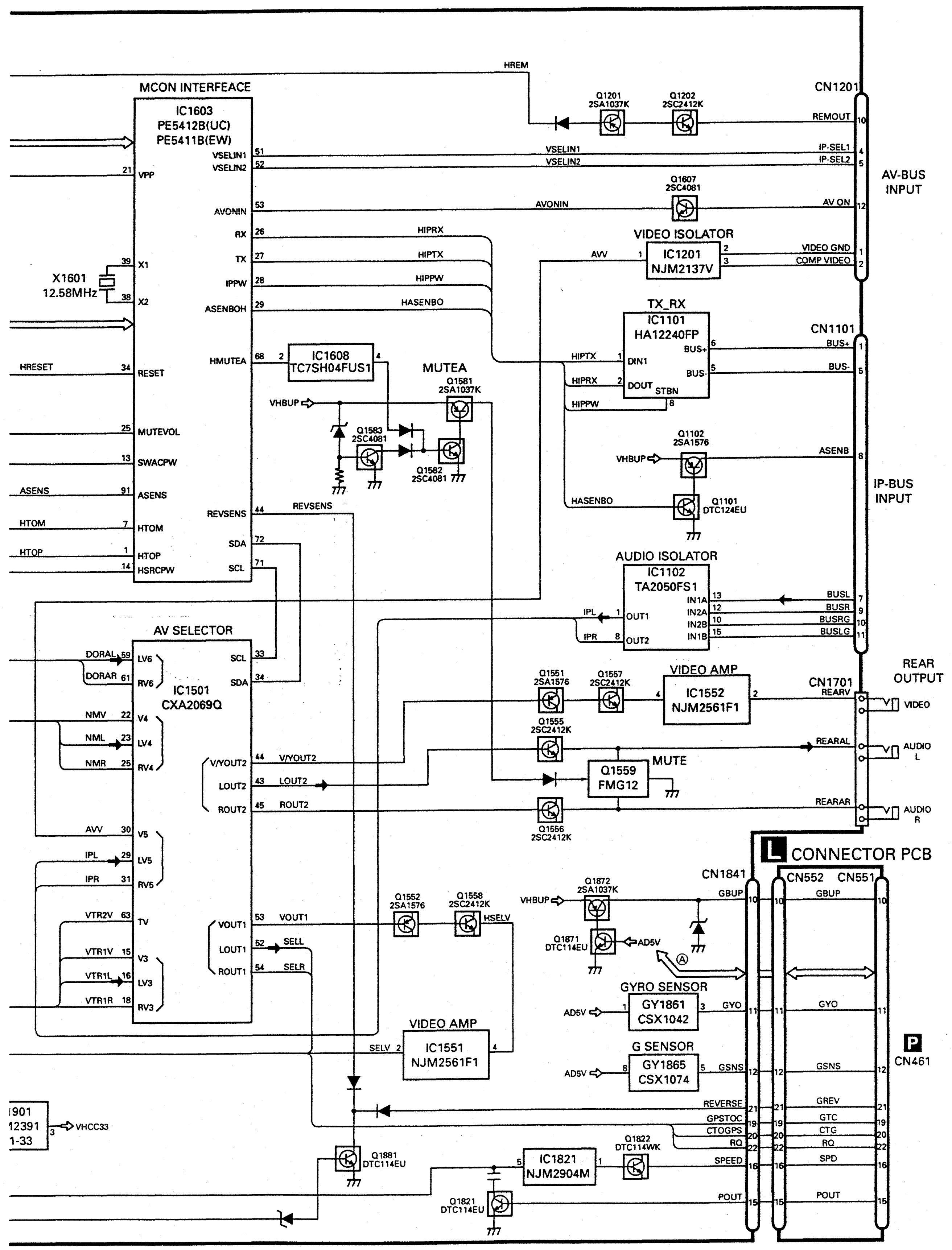

A CC UNIT (2/2)
CN607
VIDEO OUT
Q754 2SC4081
DVDV to (1/2)
ANALOG LOUT
MUTE Q2402 DTC323TU
DVD BUFF. & DVD LPF IC2407 NJM3403AV
RETL
ANALOG ROUT
MUTE Q2403 DTC323TU
RETR
D CN1611
MMUTE
MUTE CONT Q2401 UMD2N
VCONTB
CONTB
VCONTA
CONTA
SLVSTS
IC309 TC7SH08FUS1
RST3
XRES
DISCSET
LPF,AMP IC2601(2/2) NJM3403AV
ADC_GCNT0-2
ATT Q2604,2605,2607 DTC323TU Q2603,2606,2608 UMD2N
MIC HPF MIC AMP IC2601(1/2) NJM3403AV
ELECT SOU
LPF IC2553 NJM2068V
MUTE Q2409 DTC323TU
L,R SEP AMP IC2402 TC7W66FU IC2552 NJM2068V
ONSEIMUTE1
RESETM
Q2408 UMD2N
MUTE CONT
Q2414 DTC124EU
NOSELL
NOSELR
MUTENS
A (1/2)
ONSEIMIC
DACOUTL
Q731 IMD3A
VDD5
SWACPW
MUTE CONT IC2408 NJM2107F
CCD5
AU85
Q2410 UMD2N
CN731
MUTEVOL
MUTEAMP
MUTESO
OFMT
MUTEAMP
RESETM
AUPW
Q805 RSQ030P03
DSWBUP
FU809
Q806 DTC144EU
DSENS
PWRMTR
FU808
PWRVI
FU806
PWRFL
FU801
Q821 2SA1834F5
Q822 DTC114EU
MFLPWR
VST
VDT
VCK
RETR
RETL
SELR
SELL
GNDISO
Q2422 2SC4081
Q2421 UMD2N
Q2419 UMD2N
VDD
MBUP
K CN1001
BSENS
REM
MTOH
HTOM
HTOP
CTOGPS
GPSTOC
RETV
PTOH
AMPSTB
8.0V REG IC805 TPS5103IDB Q811 RK4936
FU802
DVD8 (300mA)
VCC5
Q801 2SB1260
CONTB
Q802 DTC114EU
CCD5
5V
8.5V, 5V REG IC803 TPS5102IDBT Q815,819 RK4936
FU804
8.5V
AU85
FU807
Q807 2SB1260
Q808 DTC114EU
RO
IC613 TC7SH00FUS1
IC611 TC7S04FU
IC603 TC7SH08FUS1
IRQPW
RESET
CPUWDT1
SELV
AMP IC752 NJM2137V
SELV to (1/2)
BUP
1 2 3 4
A B C D E F


J RELAY PCB
FAN MOTOR
CN691
CN2801
CN2802
CCFAN
CN2803
NFANCNT
NAVI FAN Q823-825 835
FU803
Q823,825,835 2SC4081
Q824 2SB1184F5
MICSNS
MIC
MUTEGU
WCONT
WREMIN
Q2801 2SC4081
Q2886 2SC4081
MICR
MICL
GUIDEON
WREM SEL
WREM AN
EXTENSION
ELECTRONIC VOLUME/ SOURCE SELECTOR IC2401 PML009A
DVDL
DVDR
SELL
SELR
MUTE
VST
VDT
VCK
STB
DATA
CLK
RR RL SWR SWL
Q2610 UMD2N
MBUP
MUTERCA
MUTE Q2831-2833 Q2844-2846 DTC323TU
FL RL SWL SWR RR FR
PRE L PRE R
GUIDE SP AMP IC2403 TDA7052BT
MIXIN
ONSP+
ONSP-
BREM
B.REMOTE
CN2804
GUIDE SPEAKER OUT
MUTE Q2420 DTC114EU
Q2611 UMD2N
L,R SEP AMP IC2402 TC7W66FU IC2552 NJM2068V
MUTE Q2417 Q2418 DTC323TU
AUDIO/GUIDE MIXAMP IC2404 NJM2058V
Q2416 UMD2N
MUTE CONT
Q2414 DTC124EU
Q2415 DTC124EU
AUDIO AMP IC2405 PAL007A
CN802
FL- FL+ FR- FR+ RR+ RR- RL+ RL-
MUTE CONT Q2427,2428 DTC124EU
MUTE51
BSENS
PKBSNS
ISENS
TELIN
ASENS
ANTPW
IC807 TPD1018F Q839 UMD2N
A.ANT
Vehicle I/F
Q828 IMX1
Q840 2SA1576
Q951 DTC114EU
Q704 2SA1576
Q837 2SC4081
P.B
ILL
MUTE
ACC
BACKUP1
FU810
BACKUP2
MBUP
BUP
FAN DRIVE Q971-973
CN971
FU971
Q971 IMX2
Q972 IMD3A
Q973 2SD1767
AUPW
DSENS
MFLPWR
3.3V,2.5V REG IC804 TPS5102IDBT Q816,820 RK4936
FU805
Q809 2SA1797
FU813
SD3VC
CCD3C
CCD3
VDD33
CCD5C
Q810 DTC114EU
SRVDD33
VCC33
Q803 2SA1834F5
CONTB
Q804 DTC114EU
3V REG IC806 S-L2980A33MC-C6S
BUP3C
VDD5
FU814
5.6V REG IC808 S-812C52AUA-C3G
Q829 2SB1184F5
FU802
BACKUP2
FU811
CCD25C
VCC18
IC801 PQ018EZ01ZP
1.8VREG
CONTA
FU804
DSWVDD
FU812
Q832 RSQ030P03
Q838 DTC144EU
5 6 7 8
A B C D E F

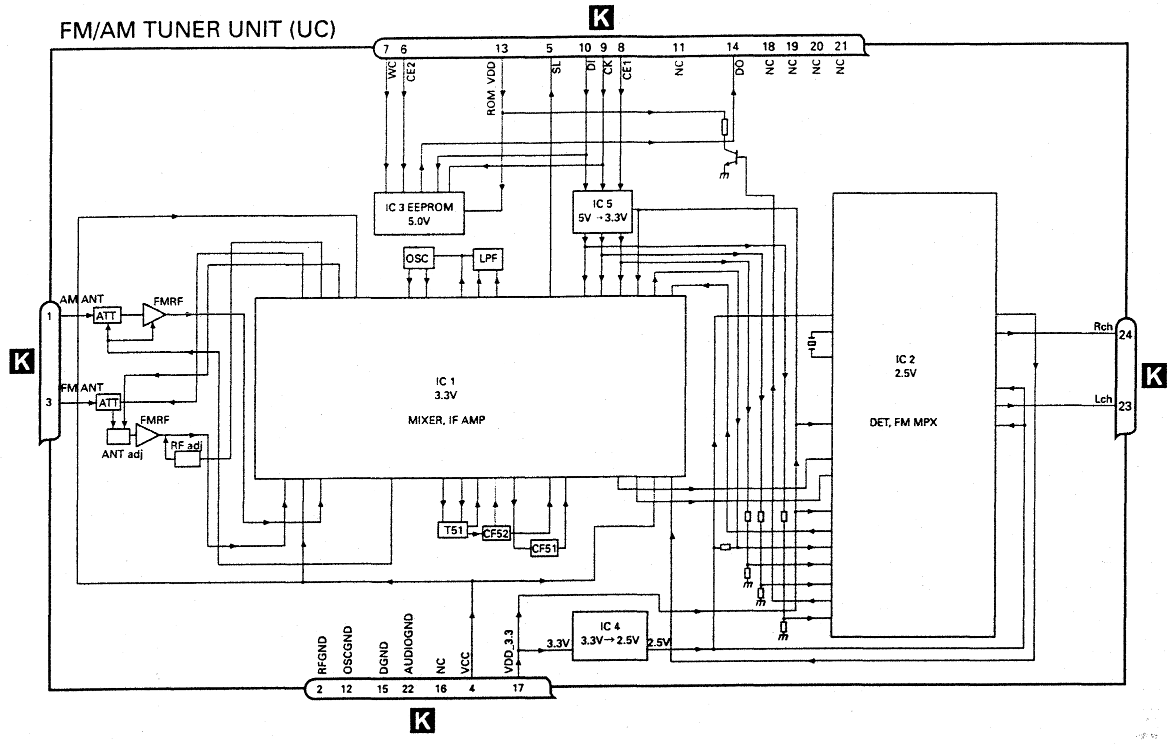

G MONITOR PCB
A
CN608
CN4002
VILMG
VILMA
REMCON
PWRFL
LCDBL
KEY0
KEY1
KEY2
HRX
HTX
MFLPW
ROT0
ROT1
SWACPW
SWAC56
VSW5V
PWRVI
FU4831
IC4702
TC7SH08FUS1
REM
LC
CON
IC4
PD6
X4701
4.97MHz
X0
X1
VCC
Q4741
DTA123JK
Q4742
DTC124EK
VLCD
MONITOR
SYSTEM
CONTROL
IC4601
PE5413B
KYDT
DPDT
LKYDT
LDPDT
LSWVDD
DIMMER
INVPUL
INVBST
IC4212
TC7SH08FUS1
TXD
RXD
MFLPW
ROT0
ROT1
RESET
IC4602
S-80835CNNB-B8U
VDDSENS
LSEN
MVIPW
TEMPSEN
DIMMER
IC4901
NJM2903V
TEMP SENS
TH4601
Q4603
2SC4617
V REG
IC4851
R1224N102H
Q4851
CPH6316
Q4831
2SB1260
Q4832
DTC114EK
Q4833
2SC4617
REG.
IC4841
R1130H251B
REG.
IC4861
MAX1748EUES1
Q4835
2SD1664
VCC(V33)
VCC(V25)
VCC(V18)
VCC(V8)
VCC(V5)
VCC(VM12)
PNLYV
PNLXV
PNLADX
PNLADY
EEP ROM
IC4651
S-93C46BR0I-J8T1
MONVBS
Q4101 2SC4617
Q4102 2SA1774
Q4103 2SC4617
FILTER
Q4101-4103
Q4111,4113,4121,4123,4131,4133 2SC4617
Q4112,4122,4132 2SA1774
FILTER
Q4111-4113
Q4121-4123
Q4131-4133
ANB
ANG
ANR
YS
IC 4061
TC7SH08FUS1
FILTER
IC 4142
TK15404AMI
FILTER
IC 4141
TC7SH08FUS1
CSYNC
Q4002
2SC4617
OSD
IC 4001
TC90A64AF-P
CVI1
BIN
GIN
RIN
FNAVI
HDIN
CDAO
CKIN
ROUT
GOUT
BOUT
POLC
X4001 42MHz
Q4151-4156
UMZ1N
RGB AMP
IC 4151
NJM2138V
Q4153(1/2)
Q4152(1/2)
Q4151(1/2)
Q4153(2/2)
Q4152(2/2)
Q4151(2/2)
VCOM AMP
IC 4181
NJM082BV
Q4183
UMT2N


I INVERTER PCB
CN4003
CN5001
NAVI SW
S5001
S5002
S5003
NAVI AV
POS
NAVI MENU
KDT4
KDT3
KST2
KST1
ILMG
ILMA
KS2
KS1
VILMG
VILMA
REM
LCD
CONTROL
IC4701
PD6340A
701
MHz
X0
X1
VLCD
Q4741
DTA123JK
Q4742
DTC124EK
VFL2
Q5001
2SC4617
Q5002
2SC4617
Q5004
2SC4617
Q5003
DTA144EE
VR5001
INVERTER
IC5003
OZ961ISN
ENA
V2500
FB
RT
CT
PDRV_A
NDRV-B
PDRV_C
NDRV-D
OVP
IC5005
SI6544DQ
IC5004
SI6544DQ
T5001
CN5002
DIMDTY
INVPUL
IC5002
TC7SET08FUS1
INVBST
PWRFL
FU5001
Q5011
2SC4081
VFL2
V5
Q5101,5102,5020
2SC4617
Q5105
UMX2N
Q5103
2SA1774
FEEDBACK DET
CN4701
LCD
CN4005
CN4301
SW
KYDT
DPDT
KDT1
KDT2
KST1
KST2
S4351
S4353
DISP
HALF/CLK
S4352
S4354
TA/NEWS
OPEN/CLOSE
SUB LCD BACK LIGHT
D4321,D4322
MMER
4901
2903V
VLBL
LSEN
AUTO DIMMER SENSOR AMP
IC4311
NJM062V
H UPPER PCB
EMP SENS
TH4601
TOUCH PANEL CONTROL
Q4681,4682
IMD2A
Q4683
FMG12
CN4681
TOUCH PANEL
PNLYV
PNLXV
PNLADX
PNLADY
LCD PANEL
EEP ROM
IC4651
C46BR0I-J8T1
LCD
BACK LIGHT
LCD
CN4801
Q4153(2/2)
Q4156
Q4152(2/2)
Q4155
Q4151(2/2)
Q4154
VR
VG
VB
COM AMP
Q4182
UMX2N
Q4183
UMT2N
VCOM

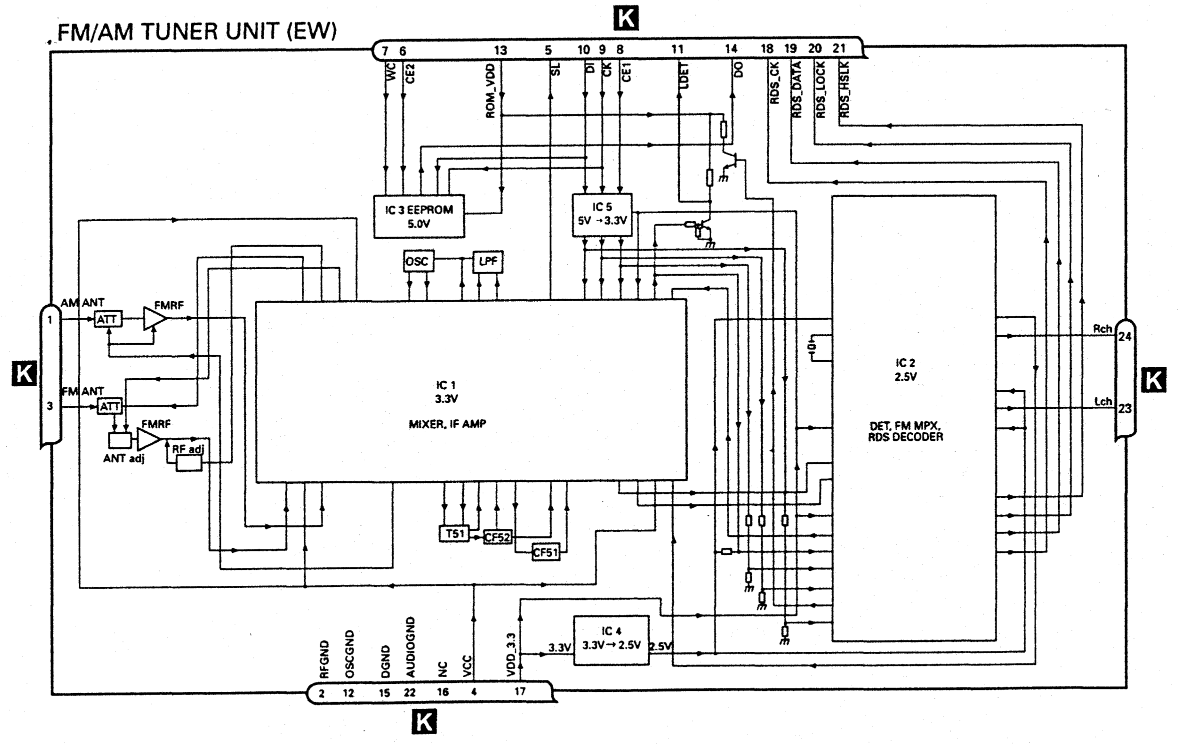

K MOTHER PCB
RF IN
CN1402
3.3V REG
IC1401
NJM2391DL1-33
VDORA85
UC model
EW model
AM_ANT
TO FM/AM TUNER UNIT
VOD_3.3
FM_ANT
Lch
Rch
AMP
IC1402
NJM4558E
DORAL
DORAR
L1407
L1411
L1413
Q1402
2SC3127
FM TUNER UNIT
Y1801
CWE1674
Q1401
2SC3357
CN1404
CN1801
CN1001
REM
PTOH
VDT
VCK
MUTEAMP
BSENS
VST
MTOH
RESET
IC1607
TC7SH08FUS1
HRESET
MUTEVOL
X1601
12.58MHz
SWVDD
FM85
SWBUP
VHVDD
VHFM85
VHBUP
Q1902
2SA1036K
VHSWAC5
Q1601
2SC2412K
VHVDD2
HMUTEVOL
Q1904
DTC114EK
HSWACPW
A
CN731
ASENBO
IC1601
TC7SH04FUS1
ASENS
HTOM
IC1605
TC7SH08FUS1
HTOP
IC1604
TC7SH08FUS1
AUDIO ISOLATOR
RETR
RETL
ISOGND
IC1002
TA2050FS1
IN2A
IN1A
IN1B
OUT2
OUT1
NMR
NML
VIDEO ISOLATOR
RETV
VGND
IC1001
NJM2137V
NMV
GPSTOC
CTOGPS
RQ
SELR
SELL
SELV
HACCPW
Q1901
2SA1036K
VHSYS5
Q1905
2SB1260
VHSYS14
Q1907
2SB1629
VDORA85
Q1903
DTC114EK
Q1906
DTC114EK
IC1902
M5237ML
AVV
IPL
IPR
FAN MOTOR
CN1950
VHSYS14
FU1951
Q1951
2SD2098
Q1908
2SD2396
Q1952
2SD2098
VHAV88
VHAV5
VTR2V
VTR1V
VTR1L
VTR1R
CN1301
VIDEO ISOLATOR
IC1302
NJM2137V
VIDEO
VCR1
INPUT
AUDIO L
AUDIO R
AUDIO ISOLATOR
IC1301
TA2050FS1
5V REG
IC1872
S-L2980A50MC-C7J
AD5V
VIDEO ISOLATOR
REAR VIEW
CAMERA
INPUT
CN1351
IC1352
NJM2137V
3V REG
IC1871
S-812C33AMC-C2N
BUP3V
Q1909
2SD2396
IC1901
NJM2391
DL1-33
VHCC33
CN1951
CAR SPEED
AND
REVERSE GEAR
SIGNAL INPUT
PULSE
REVERSE

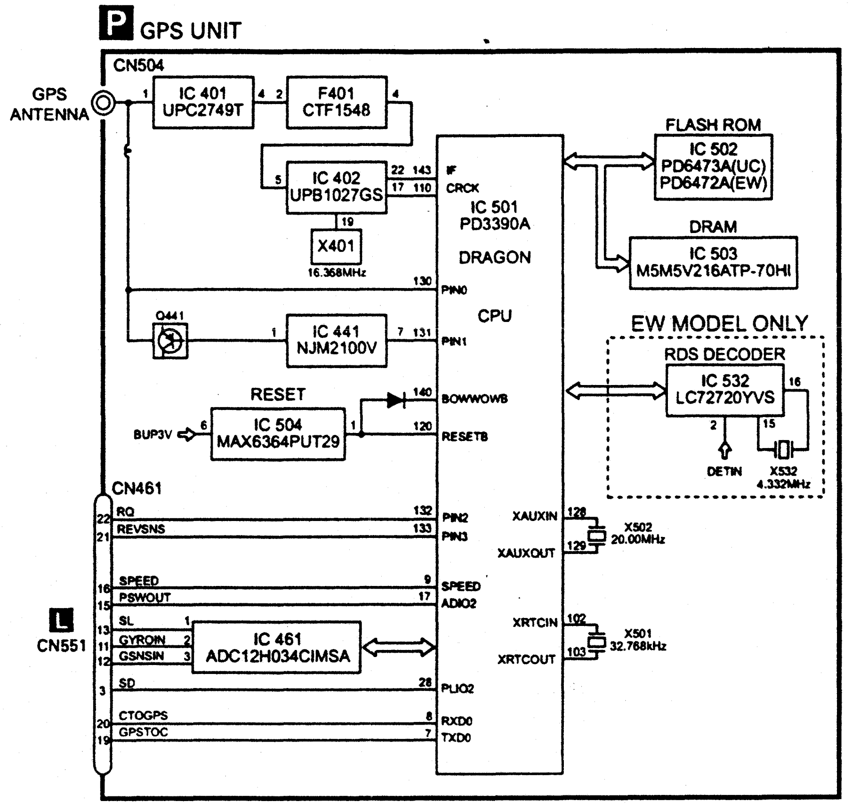

HREM
MCON INTERFEACE
IC1603
PE5412B(UC)
PE5411B(EW)
VSELIN1
VSELIN2
VPP
AVONIN
RX
TX
IPPW
ASENBOH
HMUTEA
RESET
MUTEVOL
SWACPW
ASENS
HTOM
HTOP
HSRCPW
REVSENS
SDA
SCL
X1601
12.58MHz
X1
X2
Q1201
2SA1037K
Q1202
2SC2412K
CN1201
REMOUT
IP-SEL1
IP-SEL2
AV-BUS
INPUT
Q1607
2SC4081
AV ON
VIDEO ISOLATOR
IC1201
NJM2137V
VIDEO GND
COMP VIDEO
HIPRX
HIPTX
HIPPW
HASENBO
TX_RX
IC1101
HA12240FP
DIN1
DOUT
STBN
BUS+
BUS-
CN1101
IC1608
TC7SH04FUS1
MUTEA
Q1581
2SA1037K
Q1583
2SC4081
Q1582
2SC4081
Q1102
2SA1576
ASENB
IP-BUS
INPUT
Q1101
DTC124EU
AUDIO ISOLATOR
IC1102
TA2050FS1
BUSL
BUSR
BUSRG
BUSLG
IPL
IPR
AV SELECTOR
IC1501
CXA2069Q
DORAL
DORAR
NMV
NML
NMR
V/YOUT2
LOUT2
ROUT2
AVV
VTR2V
VTR1V
VTR1L
VTR1R
VOUT1
LOUT1
ROUT1
SELL
SELR
Q1551
2SA1576
Q1557
2SC2412K
VIDEO AMP
IC1552
NJM2561F1
CN1701
REARV
REAR
OUTPUT
VIDEO
REARAL
AUDIO
L
AUDIO
R
REARAR
Q1555
2SC2412K
Q1559
FMG12
MUTE
Q1556
2SC2412K
L CONNECTOR PCB
CN1841
CN552
CN551
Q1552
2SA1576
Q1558
2SC2412K
HSELV
VIDEO AMP
IC1551
NJM2561F1
SELV
Q1872
2SA1037K
Q1871
DTC114EU
GBUP
AD5V
GYRO SENSOR
GY1861
CSX1042
GYO
G SENSOR
GY1865
CSX1074
GSNS
P
CN461
REVERSE
GREV
GPSTOC
GTC
CTOGPS
CTG
RQ
SPEED
SPD
POUT
IC1821
NJM2904M
Q1822
DTC114WK
Q1881
DTC114EU
Q1821
DTC114EU
1901
12391
1-33
VHCC33

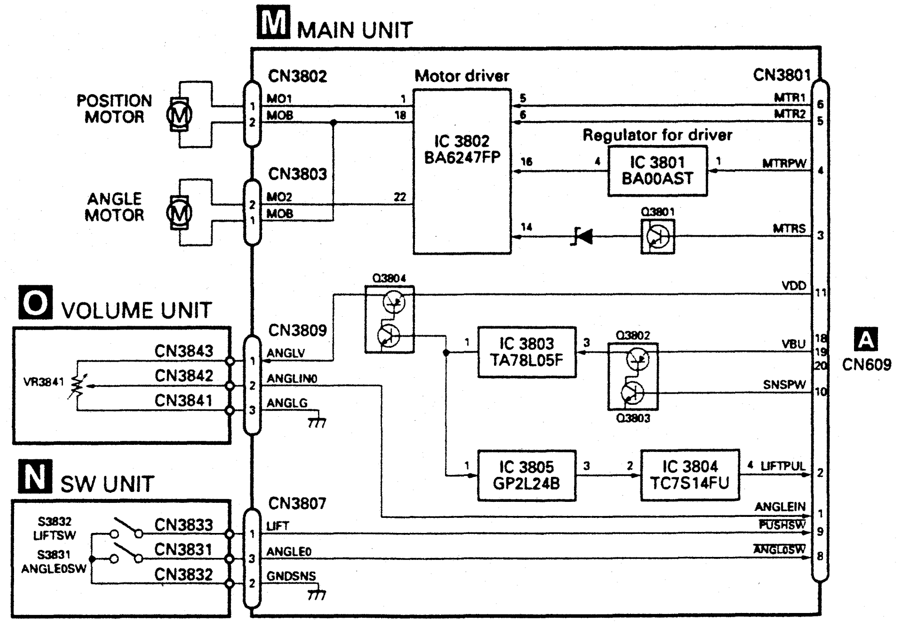
FM/AM TUNER UNIT (UC)

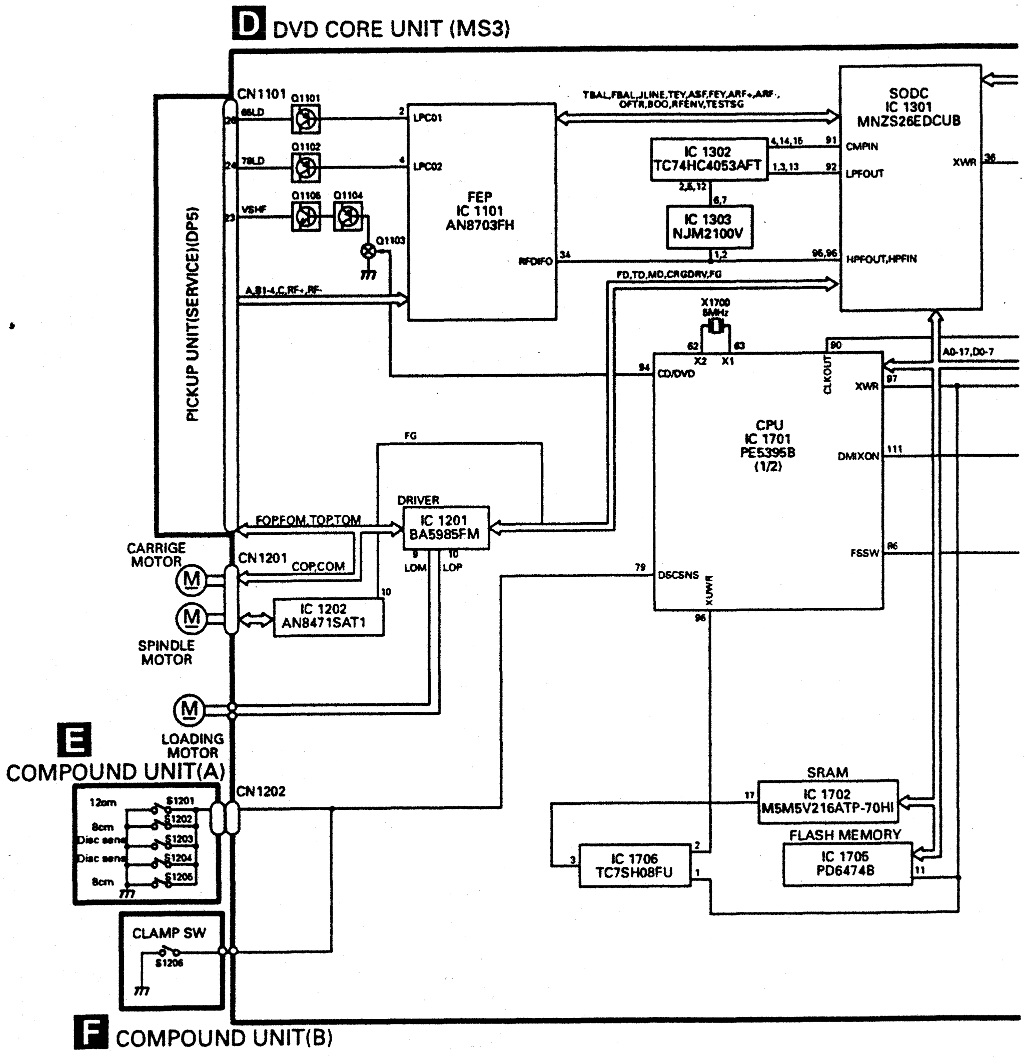

K
7 6 13 5 10 9 8 11 14 18 19 20 21
WC
CE2
ROM VDD
SL
DI
CK
CE1
NC
DO
NC
NC
NC
NC
IC 3 EEPROM
5.0V
IC 5
5V → 3.3V
OSC
LPF
AM ANT
1
ATT
FMRF
FM ANT
3
ATT
FMRF
ANT adj
RF adj
IC 1
3.3V
MIXER, IF AMP
T51
CF52
CF51
IC 2
2.5V
DET, FM MPX
Rch
24
Lch
23
IC 4
3.3V → 2.5V
3.3V
2.5V
RFGND
OSCGND
DGND
AUDIOGND
NC
VCC
VDD_3.3
2 12 15 22 16 4 17

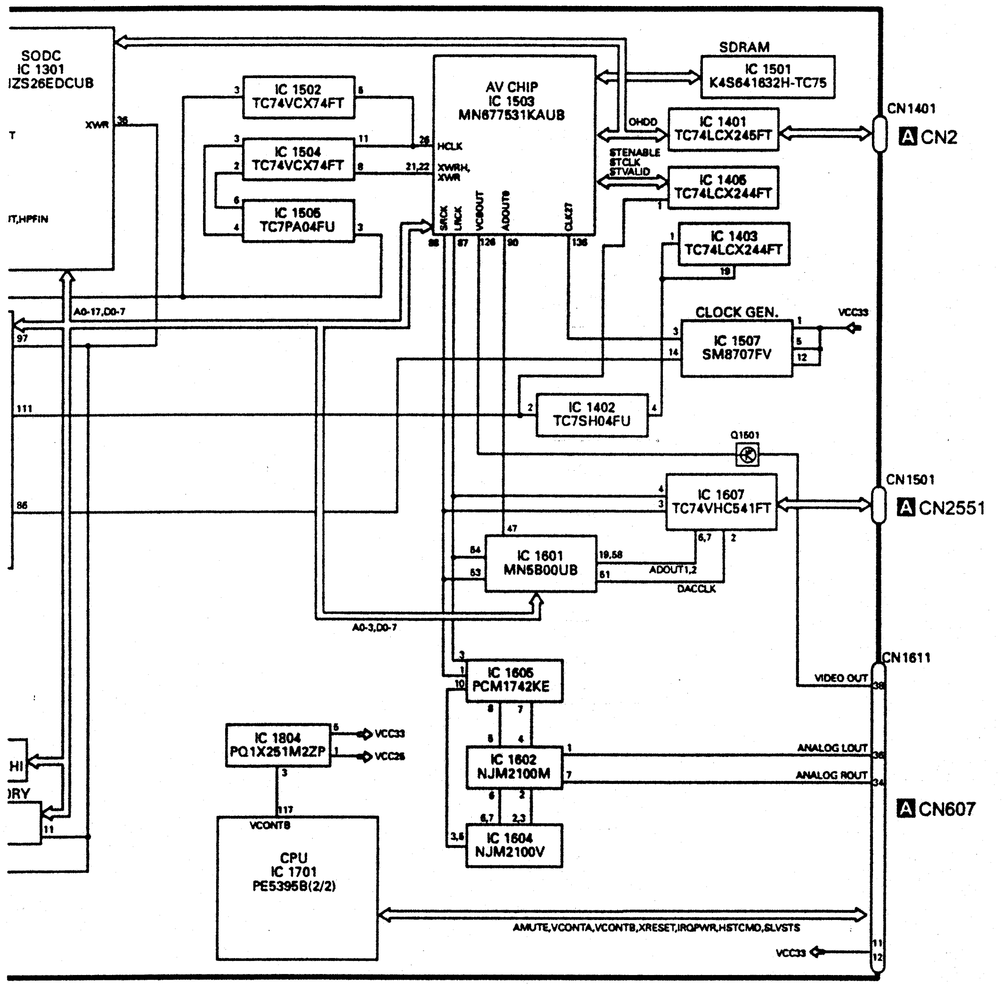
FM/AM TUNER UNIT (EW)


K
7 6 13 5 10 9 8 11 14 18 19 20 21
WC
CE2
ROM_VDD
SL
DI
CK
CE1
LDET
DO
RDS_CK
RDS_DATA
RDS_LOCK
RDS_HSLK
IC 3 EEPROM
5.0V
IC 5
5V → 3.3V
OSC
LPF
AM ANT
1
ATT
FMRF
FM ANT
3
ATT
FMRF
ANT adj
RF adj
IC 1
3.3V
MIXER, IF AMP
T51
CF52
CF51
IC 2
2.5V
DET, FM MPX,
RDS DECODER
Rch
24
Lch
23
IC 4
3.3V → 2.5V
3.3V
2.5V
RFGND
OSCGND
DGND
AUDIOGND
NC
VCC
VDD_3.3
2 12 15 22 16 4 17

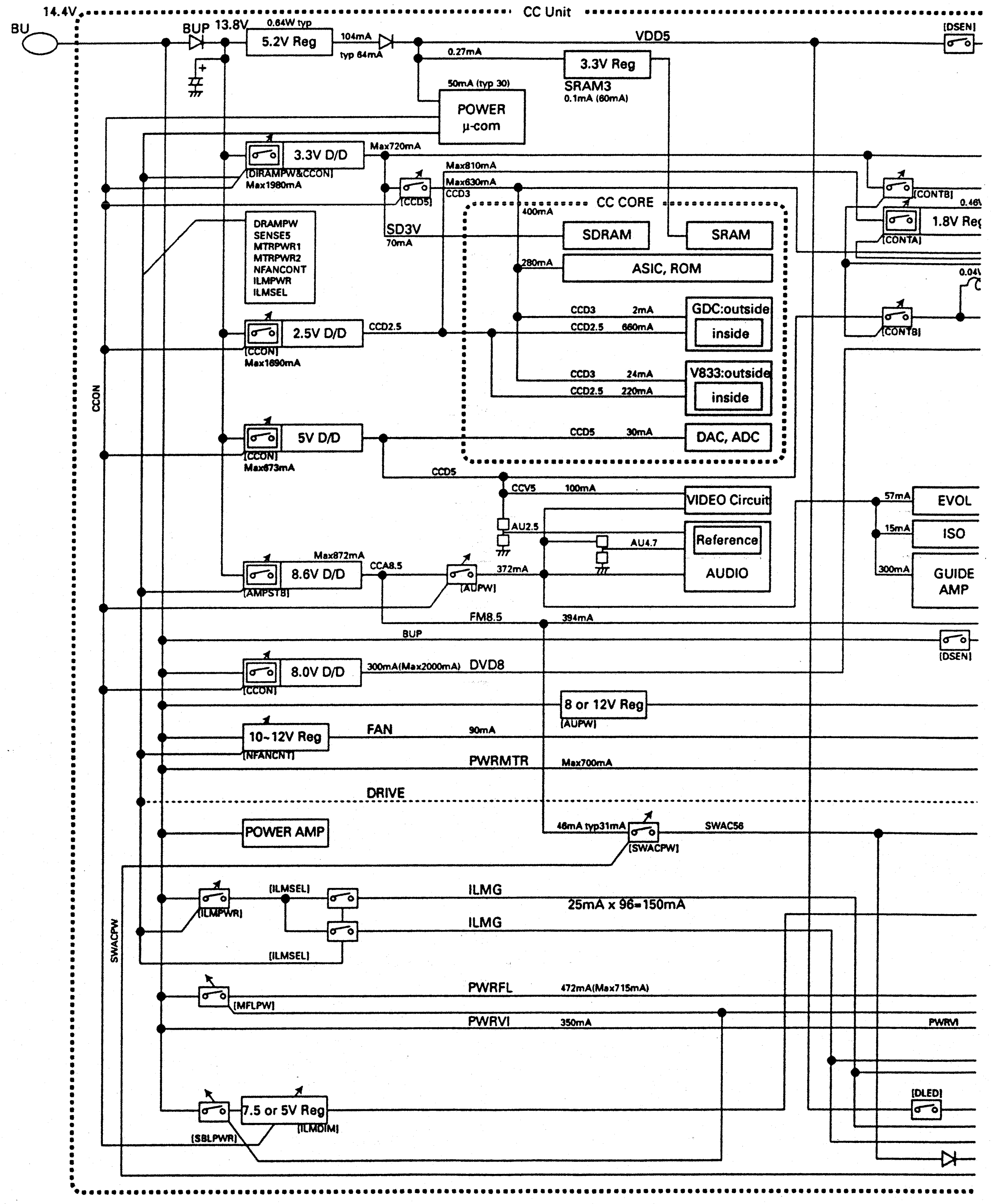

P GPS UNIT
CN504
GPS ANTENNA
IC 401 UPC2749T
F401 CTF1548
IC 402 UPB1027GS
X401 16.368MHz
IC 501 PD3390A DRAGON CPU
IF
CRCK
PIN0
PIN1
BOWWOWB
RESETB
PIN2
PIN3
SPEED
ADIO2
PLIO2
RXD0
TXD0
XAUXIN
XAUXOUT
XRTCIN
XRTCOUT
X502 20.00MHz
X501 32.768kHz
FLASH ROM
IC 502 PD6473A(UC) PD6472A(EW)
DRAM
IC 503 M5M5V216ATP-70HI
EW MODEL ONLY
RDS DECODER
IC 532 LC72720YVS
DETIN
X532 4.332MHz
Q441
IC 441 NJM2100V
RESET
IC 504 MAX6364PUT29
BUP3V
CN461
RQ
REVSNS
SPEED
PSWOUT
SL
GYROIN
GSNSIN
SD
CTOGPS
GPSTOC
IC 461 ADC12H034CIMSA
L
CN551

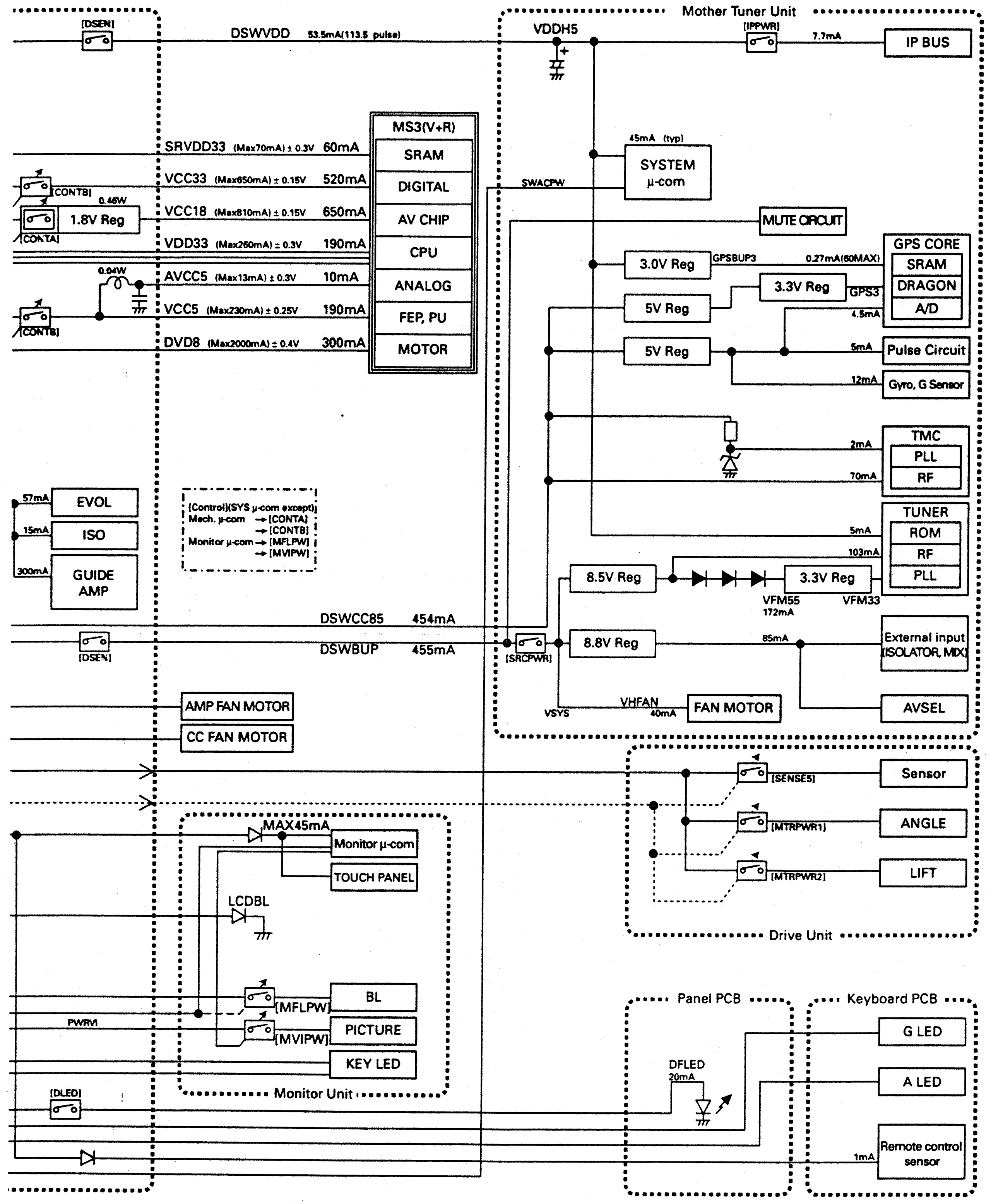

M MAIN UNIT
CN3802
MO1
MOB
POSITION MOTOR
CN3803
MO2
MOB
ANGLE MOTOR
Motor driver
IC 3802 BA6247FP
Regulator for driver
IC 3801 BA00AST
Q3801
CN3801
MTR1
MTR2
MTRPW
MTRS
VDD
VBU
SNSPW
LIFTPUL
ANGLEIN
PUSHSW
ANGL0SW
Q3804
Q3802
Q3803
IC 3803 TA78L05F
IC 3805 GP2L24B
IC 3804 TC7S14FU
A
CN609
O VOLUME UNIT
CN3843
CN3842
CN3841
VR3841
CN3809
ANGLV
ANGLIN0
ANGLG
N SW UNIT
S3832 LIFTSW
S3831 ANGLE0SW
CN3833
CN3831
CN3832
CN3807
LIFT
ANGLE0
GNDSNS


D DVD CORE UNIT (MS3)
PICKUP UNIT(SERVICE)(DP5)
CN1101
65LD
78LD
VSHF
Q1101
Q1102
Q1105
Q1104
Q1103
A,B1-4,C,RF+,RF-
FEP IC 1101 AN8703FH
LPC01
LPC02
RFDIFO
TBAL,FBAL,JLINE,TEY,ASF,FEY,ARF+,ARF-, OFTR,BOO,RFENV,TESTSG
SODC IC 1301 MNZS26EDCUB
CMPIN
LPFOUT
XWR
HPFOUT,HPFIN
IC 1302 TC74HC4053AFT
IC 1303 NJM2100V
FD,TD,MD,CRGDRV,FG
X1700 5MHz
CPU IC 1701 PE5395B (1/2)
CD/DVD
CLKOUT
XWR
DMIXON
FSSW
DSCSNS
XUWR
A0-17,D0-7
FG
DRIVER IC 1201 BA5985FM
LOM
LOP
FOP,FOM,TOP,TOM
CN1201
COP,COM
CARRIGE MOTOR
SPINDLE MOTOR
IC 1202 AN8471SAT1
LOADING MOTOR
E COMPOUND UNIT(A)
12cm
8cm
Disc sens
Disc sens
8cm
S1201
S1202
S1203
S1204
S1205
CN1202
CLAMP SW
S1206
F COMPOUND UNIT(B)
SRAM IC 1702 M5M5V216ATP-70HI
FLASH MEMORY IC 1705 PD6474B
IC 1706 TC7SH08FU


SODC
IC 1301
IZS26EDCUB
XWR
36
T
IT,HPFIN
IC 1502
TC74VCX74FT
IC 1504
TC74VCX74FT
IC 1505
TC7PA04FU
AV CHIP
IC 1503
MN677531KAUB
HCLK
XWRH, XWR
SRCK
LRCK
VCBOUT
ADOUT0
CLK27
SDRAM
IC 1501
K4S641632H-TC75
IC 1401
TC74LCX245FT
OHDD
STENABLE
STCLK
STVALID
IC 1406
TC74LCX244FT
IC 1403
TC74LCX244FT
CLOCK GEN.
IC 1507
SM8707FV
VCC33
IC 1402
TC7SH04FU
Q1601
IC 1607
TC74VHC541FT
IC 1601
MN5B00UB
ADOUT1,2
DACCLK
A0-17,D0-7
A0-3,D0-7
97
111
86
HI
RY
IC 1605
PCM1742KE
IC 1602
NJM2100M
IC 1604
NJM2100V
IC 1804
PQ1X251M2ZP
VCC33
VCC26
VCONTB
CPU
IC 1701
PE5395B(2/2)
AMUTE,VCONTA,VCONTB,XRESET,IRQPWR,HSTCMD,SLVSTS
VCC33
VIDEO OUT
ANALOG LOUT
ANALOG ROUT
CN1401
A CN2
CN1501
A CN2551
CN1611
A CN607

● POWER SUPPLY SYSTEM FIGURE


14.4V
CC Unit
BU
BUP
13.8V
0.64W typ
5.2V Reg
104mA
typ 64mA
VDD5
0.27mA
3.3V Reg
SRAM3
0.1mA (60mA)
50mA (typ 30)
POWER
µ-com
[DSEN]
3.3V D/D
[DIRAMPW&CCON]
Max1980mA
Max720mA
Max810mA
Max630mA
CCD3
[CCD5]
CC CORE
400mA
SD3V
70mA
SDRAM
SRAM
280mA
ASIC, ROM
DRAMPW
SENSE5
MTRPWR1
MTRPWR2
NFANCONT
ILMPWR
ILMSEL
2.5V D/D
[CCON]
Max1690mA
CCD2.5
CCD3 2mA
CCD2.5 660mA
GDC:outside
inside
CCD3 24mA
CCD2.5 220mA
V833:outside
inside
CCD5 30mA
DAC, ADC
5V D/D
[CCON]
Max673mA
CCD5
CCV5 100mA
VIDEO Circuit
AU2.5
AU4.7
Reference
AUDIO
8.6V D/D
[AMPSTB]
Max872mA
CCA8.5
372mA
[AUPW]
FM8.5
394mA
BUP
8.0V D/D
[CCON]
300mA(Max2000mA)
DVD8
8 or 12V Reg
[AUPW]
10~12V Reg
[NFANCNT]
FAN
90mA
PWRMTR
Max700mA
DRIVE
POWER AMP
46mA typ31mA
[SWACPW]
SWAC56
[ILMSEL]
[ILMPWR]
ILMG
25mA x 96=150mA
ILMG
[ILMSEL]
[MFLPW]
PWRFL
472mA(Max715mA)
PWRVI
350mA
PWRVI
7.5 or 5V Reg
[SBLPWR]
[ILMDIM]
[DLED]
CCON
SWACPW
[CONTB]
0.46V
1.8V Reg
[CONTA]
0.04V
[CONTB]
57mA
EVOL
15mA
ISO
300mA
GUIDE
AMP
[DSEN]


[DSEN]
DSWVDD 53.5mA(113.5 pulse)
Mother Tuner Unit
VDDH5
[IPPWR]
7.7mA
IP BUS
MS3(V+R)
SRAM
DIGITAL
AV CHIP
CPU
ANALOG
FEP, PU
MOTOR
SRVDD33 (Max70mA) ± 0.3V 60mA
VCC33 (Max650mA) ± 0.15V 520mA
VCC18 (Max810mA) ± 0.15V 650mA
VDD33 (Max260mA) ± 0.3V 190mA
AVCC5 (Max13mA) ± 0.3V 10mA
VCC5 (Max230mA) ± 0.25V 190mA
DVD8 (Max2000mA) ± 0.4V 300mA
[CONTB]
0.46W
1.8V Reg
[CONTA]
0.04W
[CONTB]
45mA (typ)
SYSTEM
μ-com
SWACPW
MUTE CIRCUIT
3.0V Reg
GPSBUP3
0.27mA(60MAX)
GPS CORE
SRAM
DRAGON
A/D
3.3V Reg
GPS3
4.5mA
5V Reg
5V Reg
5mA
Pulse Circuit
12mA
Gyro, G Sensor
2mA
TMC
PLL
70mA
RF
5mA
TUNER
ROM
103mA
RF
PLL
8.5V Reg
3.3V Reg
VFM55
172mA
VFM33
8.8V Reg
85mA
External input
[ISOLATOR, MIX]
AVSEL
VSYS
VHFAN
40mA
FAN MOTOR
57mA
EVOL
15mA
ISO
300mA
GUIDE
AMP
[Control](SYS μ-com except)
Mech. μ-com → [CONTA]
→ [CONTB]
Monitor μ-com → [MFLPW]
→ [MVIPW]
DSWCC85 454mA
DSWBUP 455mA
[DSEN]
[SRCPWR]
AMP FAN MOTOR
CC FAN MOTOR
[SENSE5]
Sensor
[MTRPWR1]
ANGLE
[MTRPWR2]
LIFT
Drive Unit
MAX45mA
Monitor μ-com
TOUCH PANEL
LCDBL
[MFLPW]
BL
PWRVI
[MVIPW]
PICTURE
KEY LED
Monitor Unit
[DLED]
Panel PCB
DFLED
20mA
Keyboard PCB
G LED
A LED
1mA
Remote control sensor
A
B
C
D
E
F

3.2 OVERALL CONNECTION DIAGRAM

Note: When ordering service parts, be sure to refer to " EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".

NOTE :

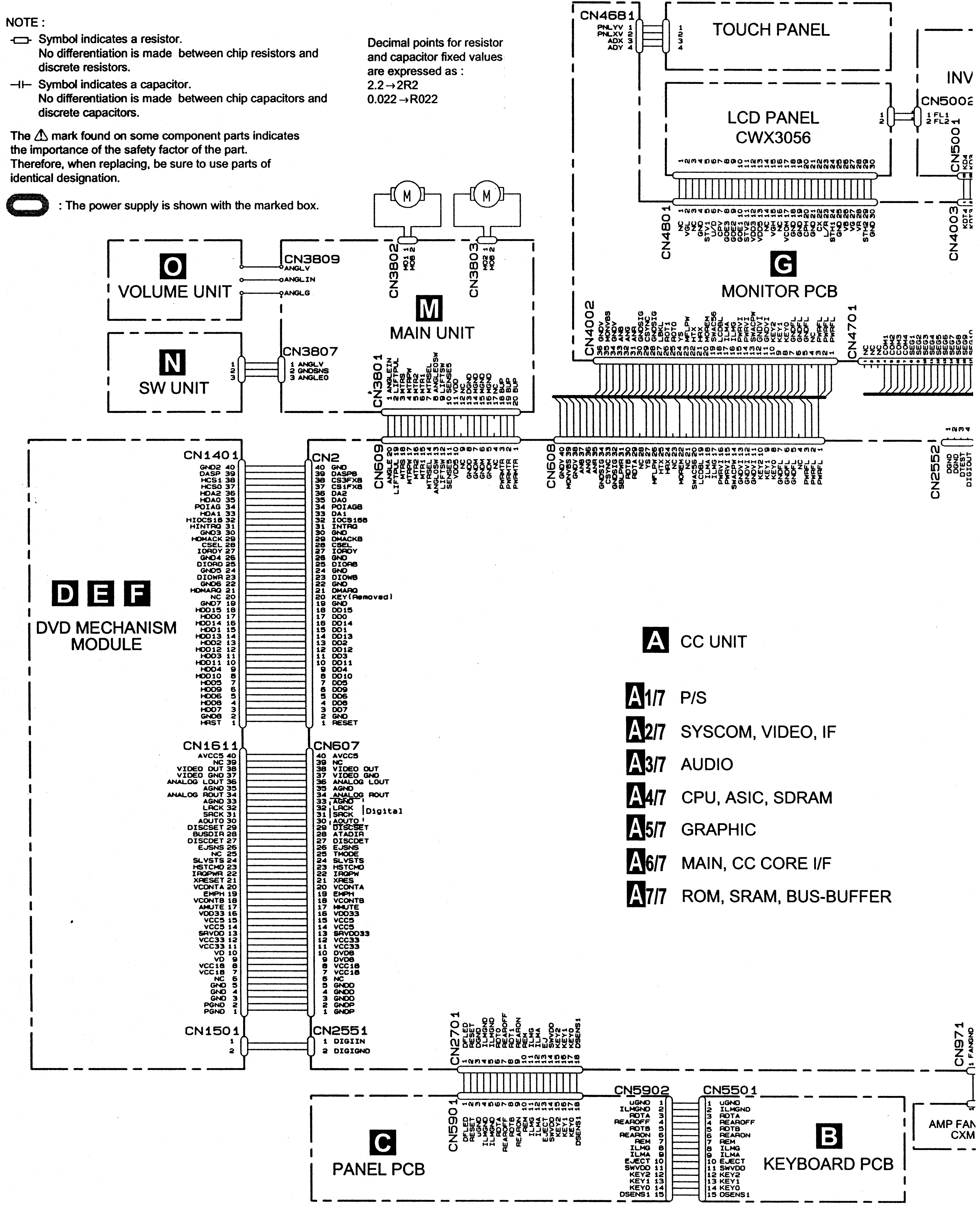
-▭- Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.

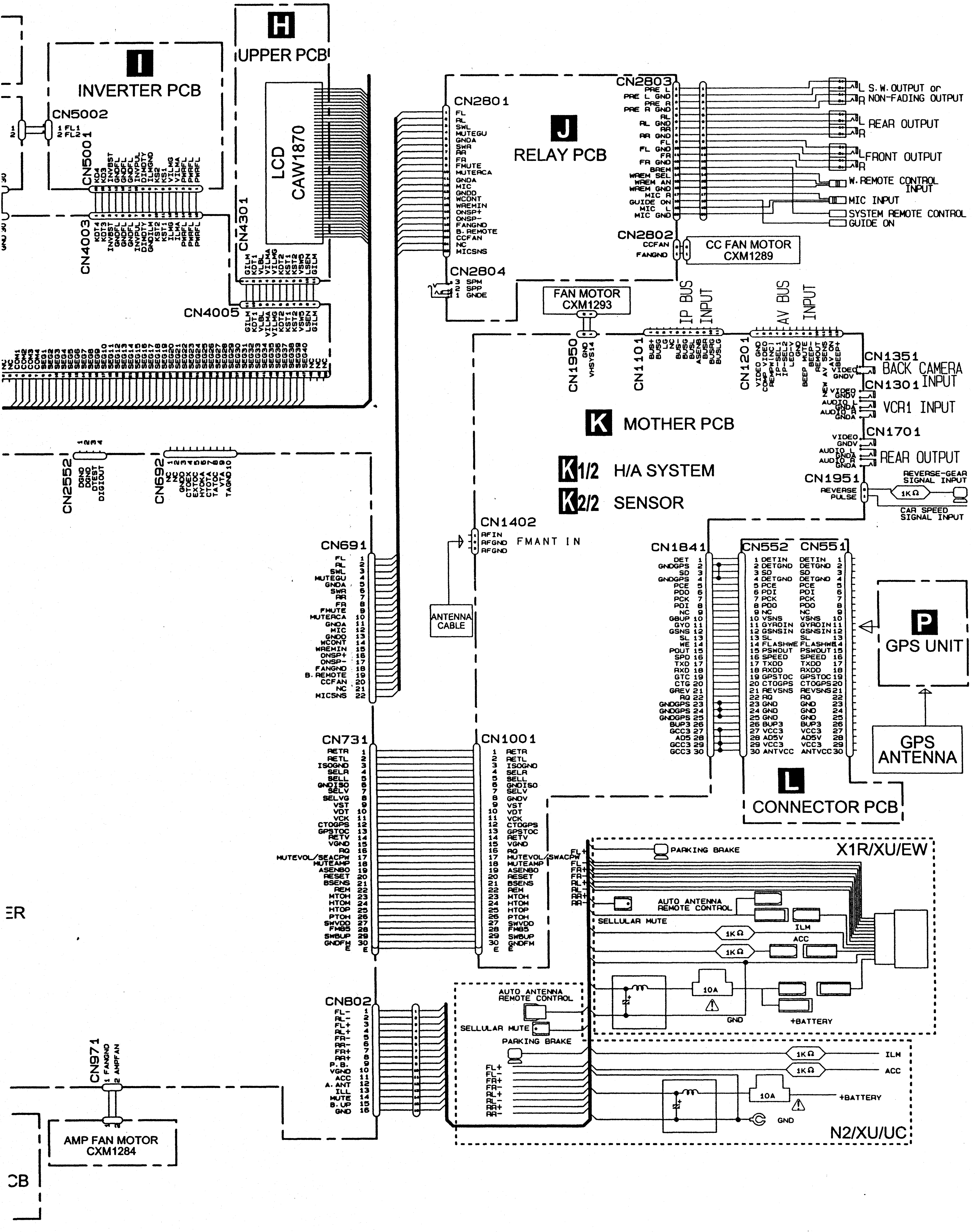
⊣⊢ Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

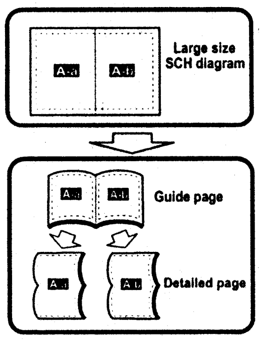
⬭ : The power supply is shown with the marked box.

Decimal points for resistor and capacitor fixed values are expressed as :
2.2→2R2
0.022→R022

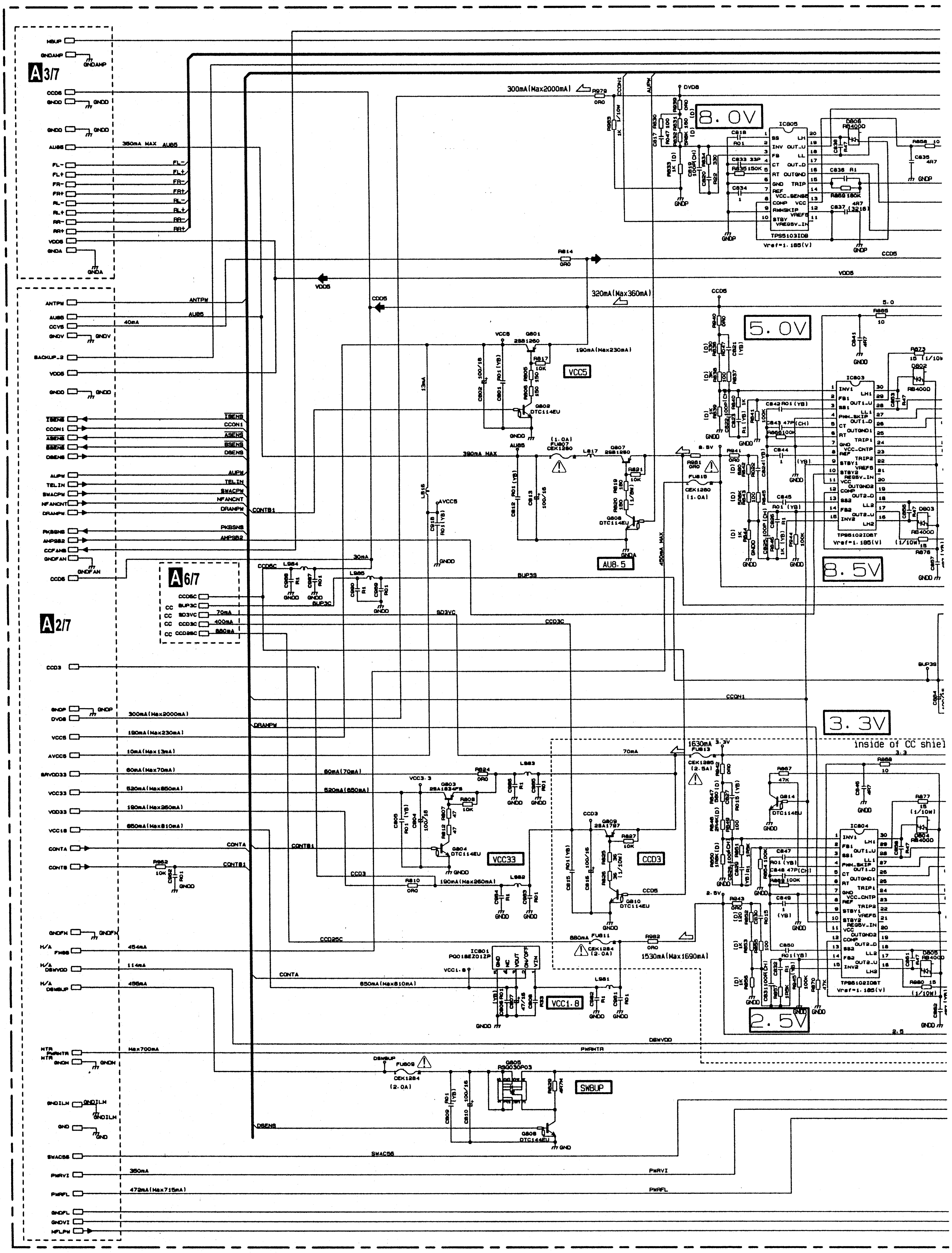

CN4681
PNLYV 1
PNLXV 2
ADX 3
ADY 4
1 2 3 4
TOUCH PANEL
INV
CN5002
1 FL1
2 FL2
1 2
LCD PANEL
CWX3056
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
CN5001
KD4
CN4801
1 NC
2 VGL
3 NC
4 GND
5 STV1
6 U/D
7 CPV
8 GOE3
9 GOE2
10 GOE1
11 STV2
12 VDD3
13 VDD5
14 NC
15 VGH
16 NC
17 VCOM
18 GND
19 GND
20 CPH
21 GND
22 CX
23 L/R
24 STH1
25 GND
26 VB
27 VG
28 VR
29 STH2
30 GND
CN4003
KDT4
G
MONITOR PCB
M
MAIN UNIT
CN3802
MO1 1
MOB 2
CN3803
MO2 1
MOB 2
M
M
O
VOLUME UNIT
CN3809
ANGLV
ANGLIN
ANGLG
N
SW UNIT
1 2 3
CN3807
1 ANGLV
2 GNDSNS
3 ANGLEO
CN3801
1 ANGLEIN
2 LIFTPUL
3 MTRS
4 MTRPW
5 MTR2
6 MTR1
7 MTRSEL
8 ANGLEOSW
9 LIFTSW
10 SENSES
11 VDD
12 NC
13 DGND
14 MGND
15 MGND
16 MGND
17 NC
18 BUP
19 BUP
20 BUP
CN609
ANGLE 20
LIFTPUL 19
MTRS 18
MTRPW 17
MTR2 16
MTR1 15
MTRSEL 14
ANGLOSW 13
LIFTSW 12
SENSES 11
VDD5 10
NC 9
GNDD 8
GNDM 7
GNDM 6
GNDM 5
NC 4
PWRMTR 3
PWRMTR 2
PWRMTR 1
CN4002
36 GNDV
35 MONVBS
34 GNDV
33 ANB
32 ANG
31 ANR
30 GNDSIG
29 CSYNC
28 GNDSIG
27 LBKL
26 ROT1
25 ROTO
24 YS
23 MFLPW
22 HTX
21 HRX
20 MOREM
19 SWAC56
18 LCDBL
17 ILMA
16 ILMG
15 PWRVI
14 PWRVI
13 SWACPW
12 GNDVI
11 GNDVI
10 KEY2
9 KEY1
8 KEY0
7 GNDFL
6 GNDFL
5 GNDFL
4 NC
3 PWRFL
2 PWRFL
1 PWRFL
CN608
GNDV 40
MONVBS 39
GNDV 38
ANB 37
ANG 36
ANR 35
GNDSIG 34
CSYNC 33
GNDSIG 32
SBLPWR 31
ROTB 30
ROTA 29
NC 28
YS 27
MFLPW 26
HTX 25
HRX 24
NC 23
MOREM 22
NC 21
SWAC56 20
LCDBL 19
ILMA 18
ILMG 17
PWRVI 16
PWRVI 15
SWACPW 14
GNDVI 13
GNDVI 12
GNDVI 11
KEY2 10
KEY1 9
KEY0 8
GNDFL 7
GNDFL 6
GNDFL 5
NC 4
PWRFL 3
PWRFL 2
PWRFL 1
CN4701
1 NC
2 NC
3 NC
4 COM1
5 COM2
6 COM3
7 COM4
8 SEG1
9 SEG2
10 SEG3
11 SEG4
12 SEG5
13 SEG6
14 SEG7
15 SEG8
16 SEG9
CN2552
1 DGND
2 DGND
3 DTEST
4 DIGIOUT
D E F
DVD MECHANISM MODULE
CN1401
GND2 40
DASP 39
HCS1 38
HCS0 37
HDA2 36
HDA0 35
POIAG 34
HDA1 33
HIOCS16 32
HINTRQ 31
GND3 30
HDMACK 29
CSEL 28
IORDY 27
GND4 26
DIORD 25
GND5 24
DIOWR 23
GND6 22
HDMARQ 21
NC 20
GND7 19
HDD15 18
HDD0 17
HDD14 16
HDD1 15
HDD13 14
HDD2 13
HDD12 12
HDD3 11
HDD11 10
HDD4 9
HDD10 8
HDD5 7
HDD9 6
HDD6 5
HDD8 4
HDD7 3
GND8 2
HRST 1
CN2
40 GND
39 DASPB
38 CS3FXB
37 CS1FXB
36 DA2
35 DA0
34 POIAGB
33 DA1
32 IOCS16B
31 INTRQ
30 GND
29 DMACKB
28 CSEL
27 IORDY
26 GND
25 DIORB
24 GND
23 DIOWB
22 GND
21 DMARQ
20 KEY(Removed)
19 GND
18 DD15
17 DD0
16 DD14
15 DD1
14 DD13
13 DD2
12 DD12
11 DD3
10 DD11
9 DD4
8 DD10
7 DD5
6 DD9
5 DD6
4 DD8
3 DD7
2 GND
1 RESET
CN1611
AVCC5 40
NC 39
VIDEO OUT 38
VIDEO GND 37
ANALOG LOUT 36
AGND 35
ANALOG ROUT 34
AGND 33
LRCK 32
SRCK 31
AOUT0 30
DISCSET 29
BUSDIR 28
DISCDET 27
EJSNS 26
NC 25
SLVSTS 24
HSTCMD 23
IRQPWR 22
XRESET 21
VCONTA 20
EMPH 19
VCONTB 18
AMUTE 17
VDD33 16
VCC5 15
VCC5 14
SRVDD 13
VCC33 12
VCC33 11
VD 10
VD 9
VCC18 8
VCC18 7
NC 6
GND 5
GND 4
GND 3
PGND 2
PGND 1
CN607
40 AVCC5
39 NC
38 VIDEO OUT
37 VIDEO GND
36 ANALOG LOUT
35 AGND
34 ANALOG ROUT
33 AGND
32 LRCK
31 SRCK
30 AOUT0
Digital
29 DISCSET
28 ATADIR
27 DISCDET
26 EJSNS
25 TMODE
24 SLVSTS
23 HSTCMD
22 IRQPW
21 XRES
20 VCONTA
19 EMPH
18 VCONTB
17 MMUTE
16 VDD33
15 VCC5
14 VCC5
13 SRVDD33
12 VCC33
11 VCC33
10 DVD8
9 DVD8
8 VCC18
7 VCC18
6 NC
5 GNDD
4 GNDD
3 GNDD
2 GNDP
1 GNDP
CN1501
1
2
CN2551
1 DIGIIN
2 DIGIGND
A CC UNIT
A1/7 P/S
A2/7 SYSCOM, VIDEO, IF
A3/7 AUDIO
A4/7 CPU, ASIC, SDRAM
A5/7 GRAPHIC
A6/7 MAIN, CC CORE I/F
A7/7 ROM, SRAM, BUS-BUFFER
CN2701
1 DFLED
2 RESET
3 DGND
4 ILMGND
5 ILMGND
6 ROTO
7 REAROFF
8 ROT1
9 REARON
10 REM
11 ILMG
12 ILMA
13 EJ
14 SWVDD
15 KEY2
16 KEY1
17 KEY0
18 DSENS1
CN5901
1 DFLED
2 RESET
3 UGND
4 ILMGND
5 ILMGND
6 ROTA
7 REAROFF
8 ROTB
9 REARON
10 REM
11 ILMG
12 ILMA
13 EJECT
14 SWVDD
15 KEY2
16 KEY1
17 KEY0
18 DSENS1
CN971
1 FANGND
C
PANEL PCB
CN5902
UGND 1
ILMGND 2
ROTA 3
REAROFF 4
ROTB 5
REARON 6
REM 7
ILMG 8
ILMA 9
EJECT 10
SWVDD 11
KEY2 12
KEY1 13
KEY0 14
DSENS1 15
CN5501
1 UGND
2 ILMGND
3 ROTA
4 REAROFF
5 ROTB
6 REARON
7 REM
8 ILMG
9 ILMA
10 EJECT
11 SWVDD
12 KEY2
13 KEY1
14 KEY0
15 DSENS1
B
KEYBOARD PCB
AMP FAN
CXM


A
B
C
D
E
F
H
UPPER PCB
I
INVERTER PCB
CN5002
CN5001
CN4003
CN4301
CN4005
LCD
CAW1870
J
RELAY PCB
CN2801
CN2803
CN2802
CN2804
CC FAN MOTOR
CXM1289
FAN MOTOR
CXM1293
L S.W. OUTPUT or
R NON-FADING OUTPUT
L REAR OUTPUT
R
L FRONT OUTPUT
R
W. REMOTE CONTROL INPUT
MIC INPUT
SYSTEM REMOTE CONTROL
GUIDE ON
IP BUS INPUT
AV BUS INPUT
CN1950
CN1101
CN1201
CN1351
BACK CAMERA INPUT
CN1301
VCR1 INPUT
CN1701
REAR OUTPUT
CN1951
REVERSE-GEAR SIGNAL INPUT
CAR SPEED SIGNAL INPUT
1kΩ
K
MOTHER PCB
K1/2
H/A SYSTEM
K2/2
SENSOR
CN2552
CN692
CN691
CN1402
FMANT IN
ANTENNA CABLE
CN1841
CN552
CN551
P
GPS UNIT
GPS ANTENNA
L
CONNECTOR PCB
CN731
CN1001
X1R/XU/EW
PARKING BRAKE
AUTO ANTENNA REMOTE CONTROL
SELLULAR MUTE
ILM
ACC
10A
GND
+BATTERY
CN802
CN971
AMP FAN MOTOR
CXM1284
N2/XU/UC
ER
CB

3.3 CC UNIT (P/S)(GUIDE PAGE)


A-a
A-b
Large size SCH diagram
A-a
A-b
Guide page
A-a
A-b
Detailed page

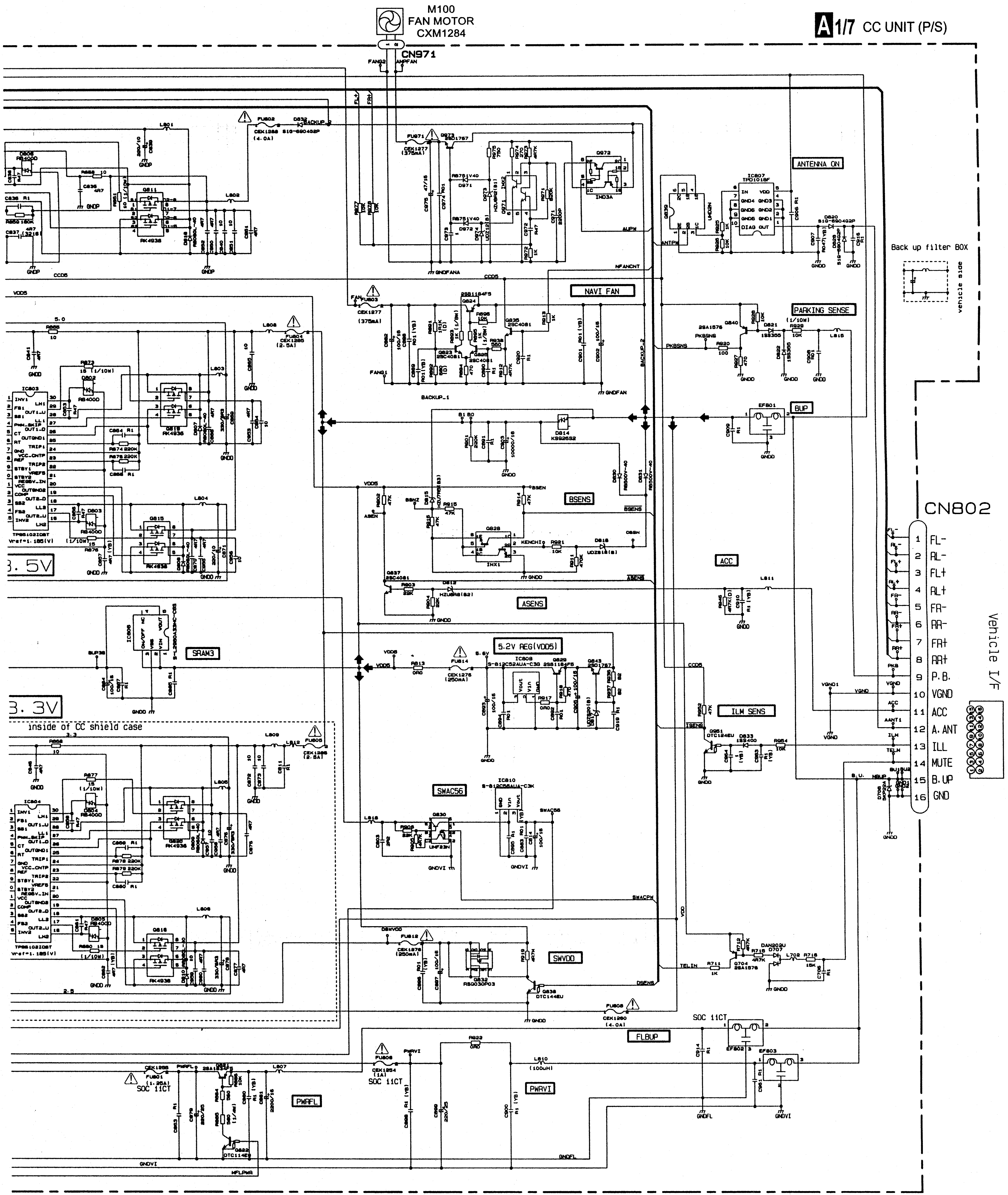
A-a 1/7


A 3/7
A 6/7
A 2/7
300mA(Max2000mA)
320mA(Max360mA)
8.0V
5.0V
8.5V
3.3V
2.5V
inside of CC shield
IC805
TPS5103IDB
IC803
TPS5102IDBT
IC804
TPS5102IDBT
IC801
PQ018EZ01ZP
Q801
2SB1260
Q802
DTC114EU
Q807
2SB1260
Q808
DTC114EU
Q803
2SA1834FS
Q804
DTC114EU
Q809
2SA1797
Q810
DTC114EU
Q805
RSQ030P03
Q806
DTC144EU
VCC5
AU8.5
VCC33
CCD3
VCC1.8
SWBUP
FU807
CEK1260
(1.0A)
FU815
CEK1260
(1.0A)
FU813
CEK1285
(2.5A)
FU811
CEK1284
(2.0A)
FU809
CEK1284
(2.0A)
1630mA
1530mA(Max1690mA)
880mA
VDD5
CCD5
AU85
ANTPW
BACKUP_2
DSENS
SWACSS
PWRVI
PWRFL
GNDP
DVD8
CONTA
CONTB1
CCD25C
BUP3S
SD3VC
CCD3C
CCON1
DRAMPW
PWRHTR
DSWVDD
Vref=1.185(V)

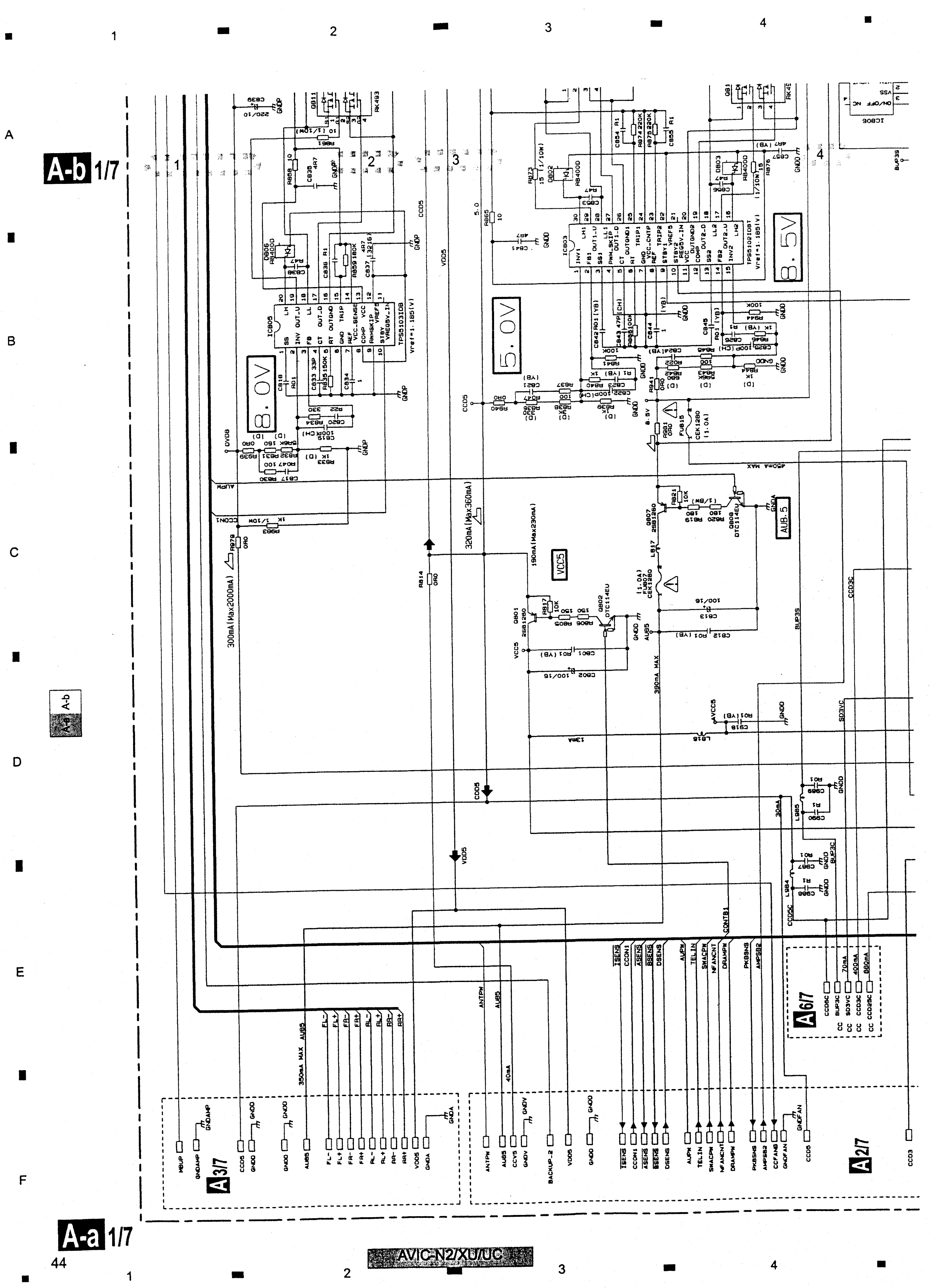
A 1/7

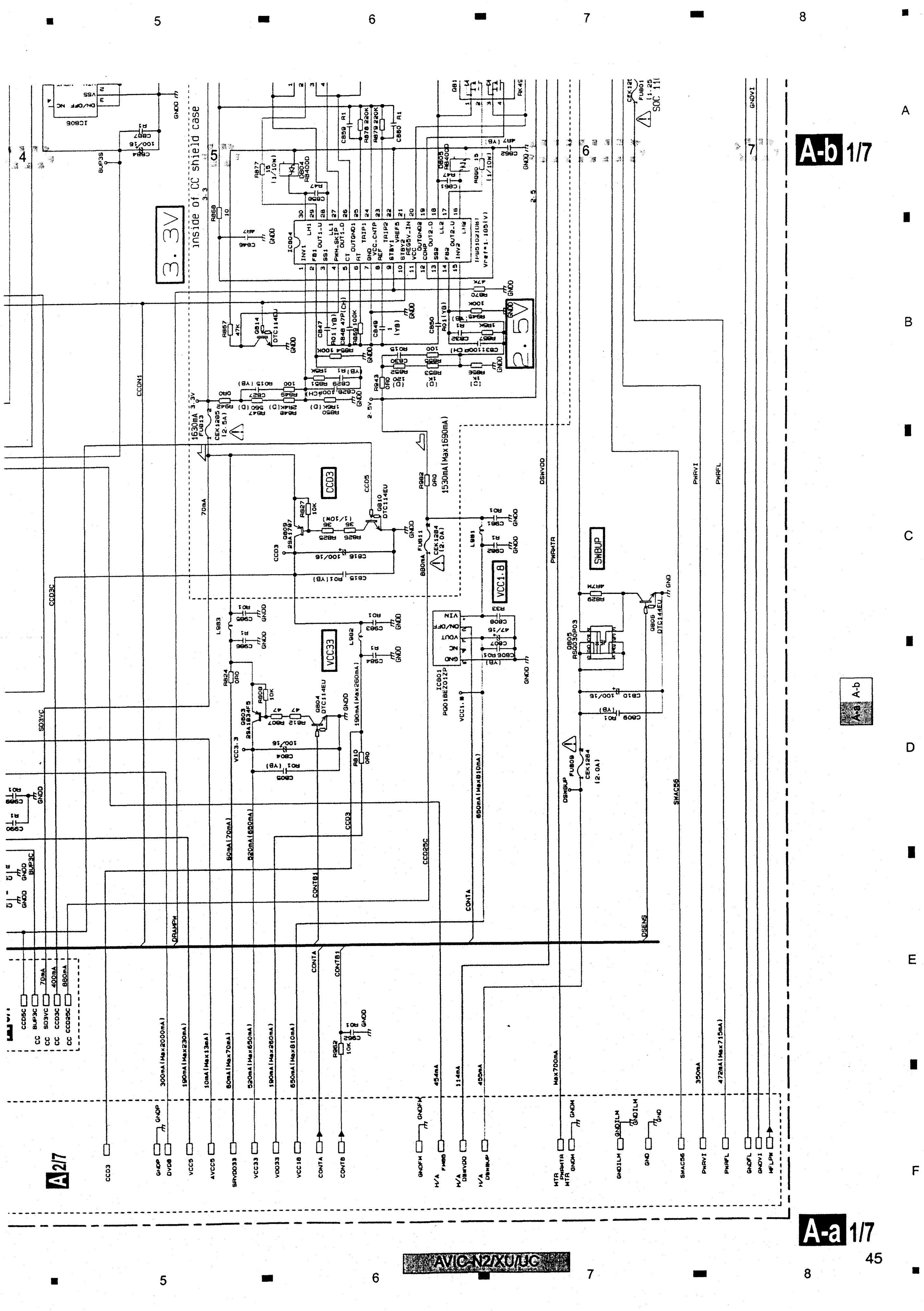
A-b 1/7

A 1/7 CC UNIT (P/S)

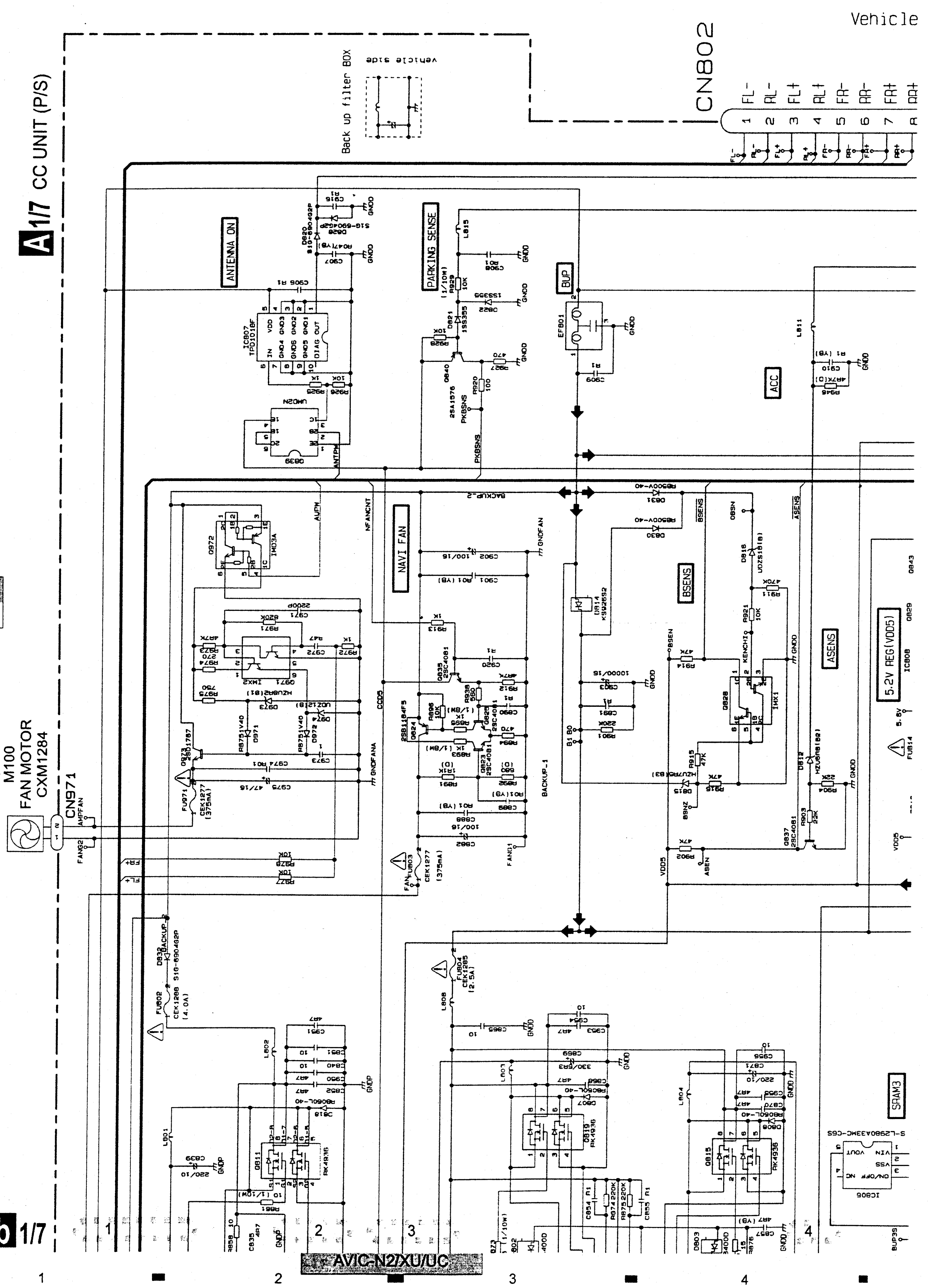

M100
FAN MOTOR
CXM1284
CN971
FANG2
AMPFAN
FU802
CEK1288 (4.0A)
D832 S1G-690402P
BACKUP_2
FU971
CEK1277 (375mA)
Q973 2SD1767
Q972
IND3A
IC807
TPD1018F
ANTENNA ON
D820 S1G-690402P
Back up filter BOX
vehicle side
AUPX
ANTPW
NFANCNT
CCD5
NAVI FAN
Q824 2SB1184F5
Q835 2SC4081
Q823 2SC4081
Q825 2SC4081
FU803
CEK1277 (375mA)
FANG1
BACKUP_1
GNDFAN
GNDFANA
PARKING SENSE
Q840 2SA1576
PKBSNS
D821 1SS355
L815
GNDD
Q811
RK4936
Q818
RK4936
Q815
RK4936
Q802 RB400D
Q803 RB400D
IC803
TPS61021DBT
Vref=1.185(V)
3.5V
FU804
CEK1286 (2.5A)
VDD5
B1 B0
D814 KS9265S2
BUP
EF801
BSEN
BSENS
Q828
INX1
KENCHI
D816 UDZ818(B)
ACC
L811
ASENS
Q837 2SC4081
D812 HZU6R8(B2)
IC806
S-L2980A33MC-C6S
SRAM3
BUP3B
GNDD
3.3V
inside of CC shield case
5.2V REG(VDD5)
FU814
CEK1276 (250mA)
IC808
S-812C52AUA-C3G
Q829 2SB1184F5
Q843 2SD1767
ILM SENS
D851 DTC124EU
D833 1SS400
IC804
TPS61021DBT
Vref=1.185(V)
Q826 RK4936
Q804 RB400D
Q816 RK4936
Q805 RB400D
SWAC56
Q830
UNF23N
IC810
S-812C56AUA-C3K
GNDVI
SWACPW
D8WVDD
FU812
CEK1276 (250mA)
Q832 RSQ030P03
SWVDD
Q838 DTC144EU
DSENS
FU808
CEK1280 (4.0A)
TELIN
Q704 2SA1576
D707 DAN202U
L702
SOC 11CT
EF802
EF803
FLBUP
GNDFL
FU806
CEK1264 (1A)
SOC 11CT
PWRVI
L810 (100uH)
R822 0R0
CEK1288
FU801 (1.25A)
SOC 11CT
Q831 2SA1576
L807
PWRFL
Q822 DTC114EU
HFLPWR
GNDVI
VGND1
CN802
1 FL-
2 RL-
3 FL+
4 RL+
5 FR-
6 RR-
7 FR+
8 RR+
9 P.B.
10 VGND
11 ACC
12 A.ANT
13 ILL
14 MUTE
15 B.UP
16 GND
vehicle I/F

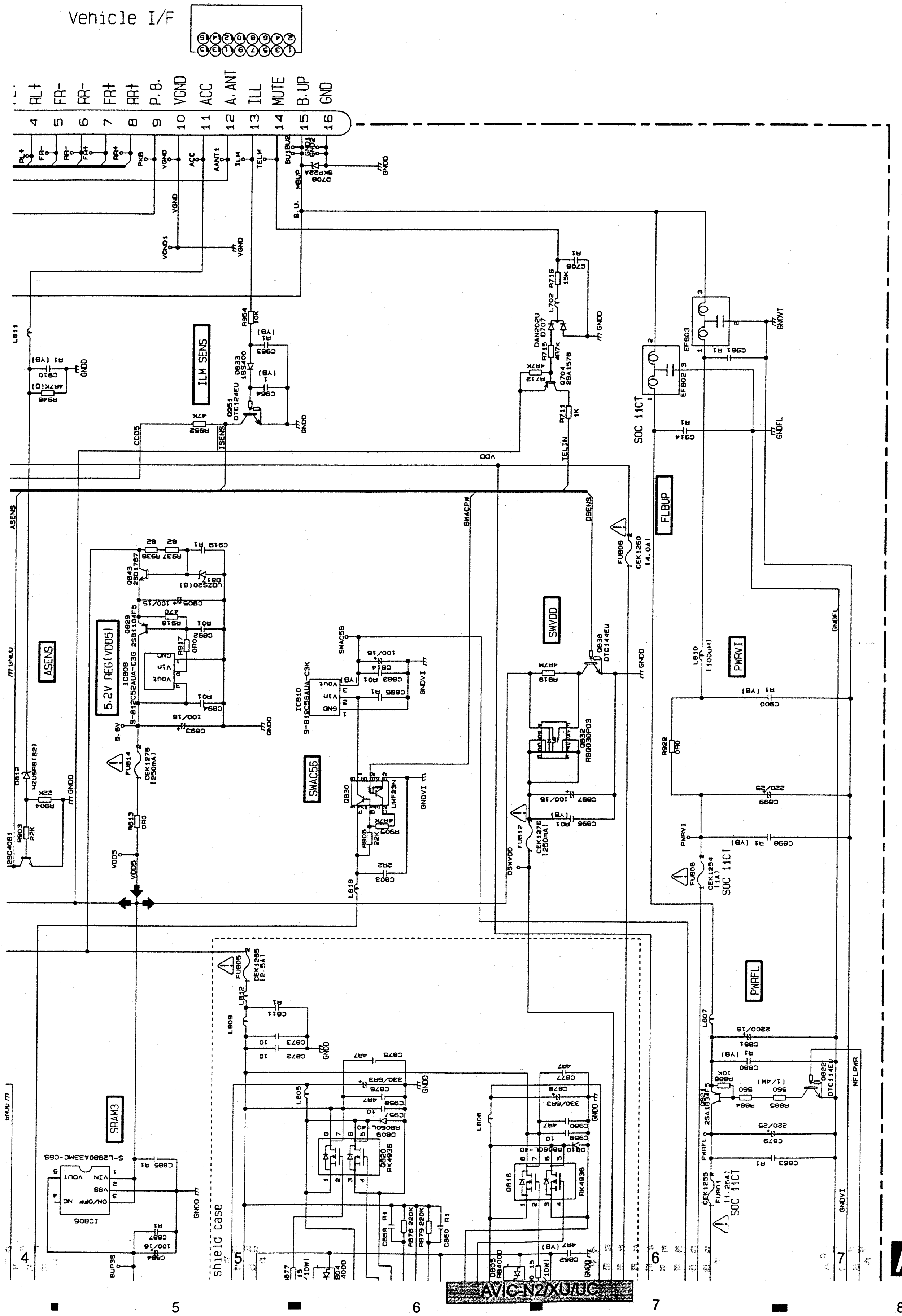
A 1/7


A-b 1/7
A-a 1/7
1
2
3
4
A
B
C
D
E
F
8.0V
5.0V
8.5V
VCC5
AUB.5
IC805
TPS5103IDB
IC803
TPS5102IDBT
CEK1280
A 3/7
A 2/7
A 6/7
300mA(Max2000mA)
320mA(Max360mA)
390mA MAX
450mA MAX
A-b

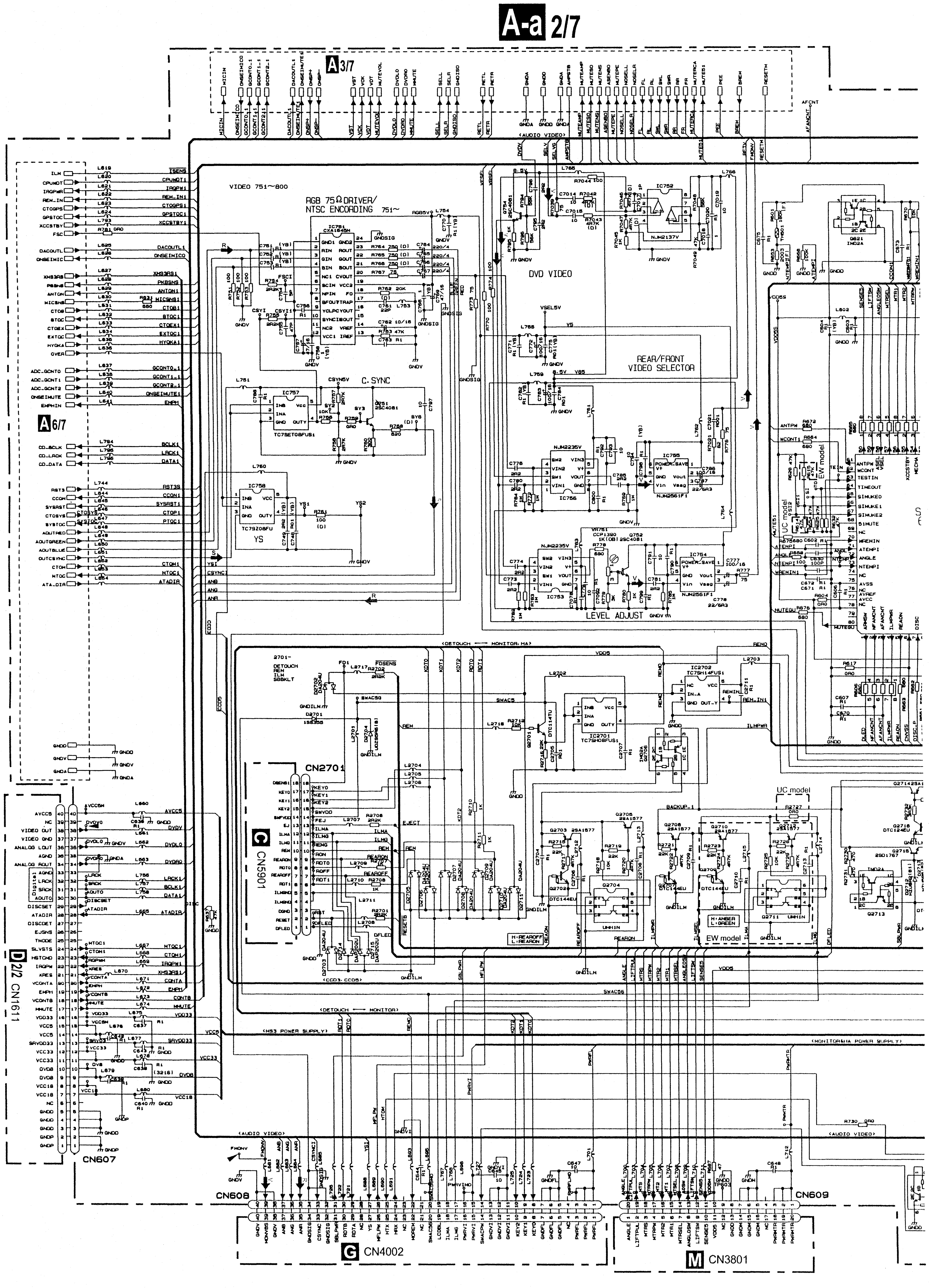

A-b 1/7
A-a 1/7
5
6
7
8
A
B
C
D
E
F
3.3V
inside of CC shield case
2.5V
CC03
VCC33
VCC1.8
SWBUP
IC804
TPS5102IDBT
IC806
IC801
A 2/7
1530mA(Max1690mA)
880mA
A-b

A 1/7 CC UNIT (P/S)


Vehicle
CN802
1 FL-
2 RL-
3 FL+
4 RL+
5 FR-
6 RR-
7 FR+
Back up filter BOX
vehicle side
ANTENNA ON
IC807
TPD1018F
UM02N
Q839
PARKING SENSE
BUP
EF801
ACC
NAVI FAN
BSENS
ASENS
5.2V REG(VDD5)
M100
FAN MOTOR
CXM1284
CN971
FU971
CEK1277
(375mA)
FU803
CEK1277
(375mA)
FU802
CEK1288
(4.0A)
FU804
CEK1285
(2.5A)
Q811
Q819
Q815
RK4936
SRAM3
IC806
S-L2980A33MC-C6S
BACKUP_2
BACKUP_1
VDD5
GNDD

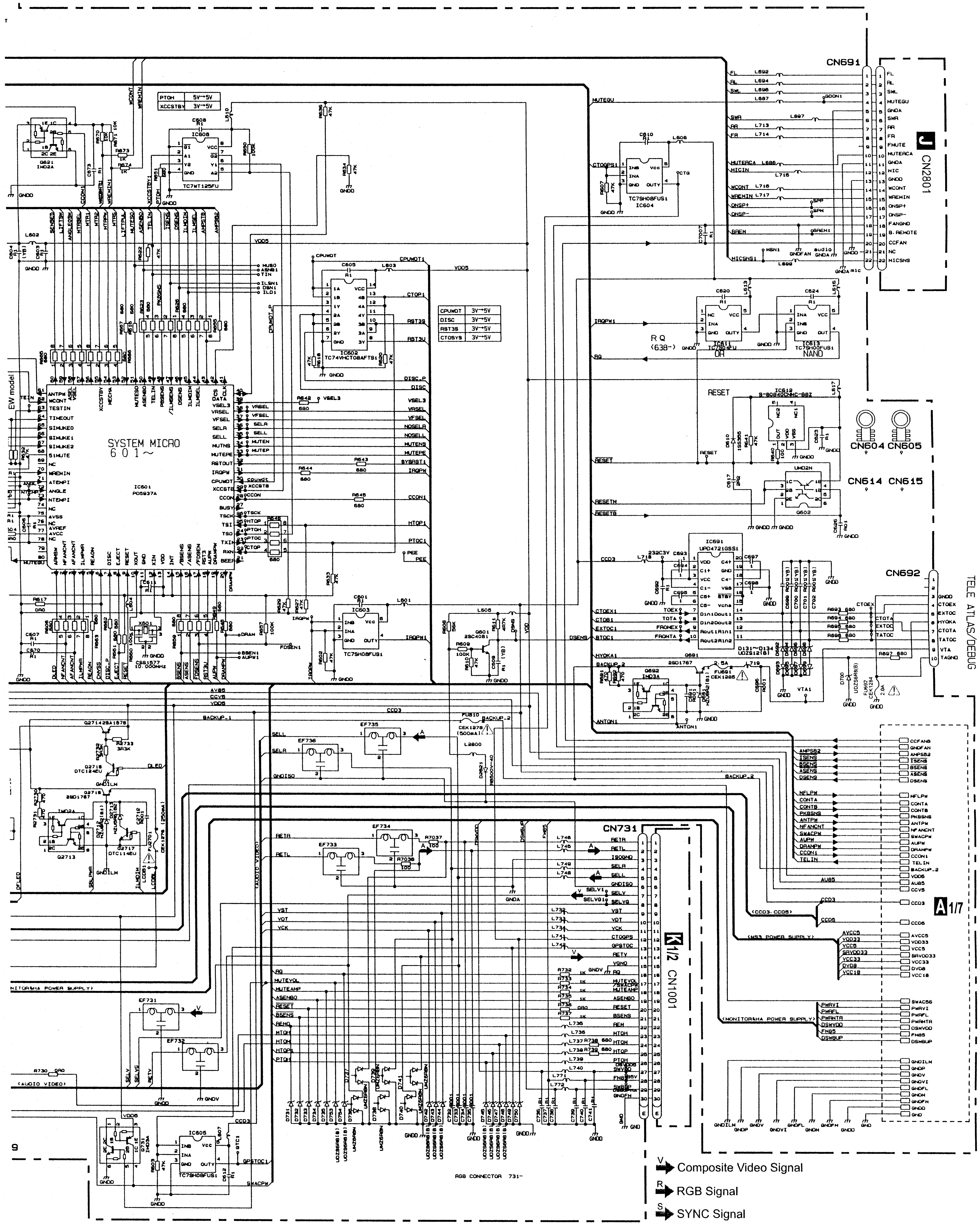

Vehicle I/F
4 RL+
5 FR-
6 RR-
7 FR+
8 RR+
9 P.B.
10 VGND
11 ACC
12 A.ANT
13 ILL
14 MUTE
15 B.UP
16 GND
ILM SENS
5.2V REG(VDD5)
IC808
IC810
S-812C50AUA-C3K
ASENS
SWAC56
SWVDD
FLBUP
EF802
EF803
SOC 11CT
PWRVI
PWRFL
FU808
CEK1260
(4.0A)
FU806
CEK1254
(1A)
FU801
CEK1255
(1.25A)
FU805
CEK1285
(2.5A)
FU814
FU812
SRAM3
IC805
S-L2980A33MC-C6S
Shield case
Q820
Q816
RK4936
GNDVI
GNDFL

3.4 CC UNIT (SYSCOM, VIDEO, IF)(GUIDE PAGE)


A-a 2/7
A 3/7
A 6/7
VIDEO 751~800
RGB 75Ω DRIVER/
NTSC ENCORDING 751~
IC751
CXA1645M
DVD VIDEO
IC752
NJM2137V
C. SYNC
IC757
TC7SET08FUS1
IC758
TC7S708FU
YS
REAR/FRONT
VIDEO SELECTOR
IC756
NJM2235V
IC755
NJM2561F1
IC753
IC754
LEVEL ADJUST
DETOUCH ← MONITOR: HA
IC2702
TC7SH14FUS1
IC2701
TC7SH08FUS1
CN2701
C CN5901
UC model
EW model
H: AMBER
L: GREEN
H: REAROFF
L: REARON
D 2/2 CN1611
CN607
CN608
CN609
G CN4002
M CN3801
AUDIO VIDEO
NS3 POWER SUPPLY
MONITOR&HA POWER SUPPLY

A-b 2/7

A 2/7 CC UNIT (SYSCOM, VIDEO, IF)


CN691
J CN2801
SYSTEM MICRO 601~
IC601 PD5937A
IC608 TC7WT125FU
IC602 TC74VHCT08AFTS1
IC604 TC7SH08FUS1
IC611 TC7SH32FU OR
IC613 TC7SH00FUS1 NAND
IC612 S-80840CNMC-B8Z
RESET
RQ (638-)
CN604 CN605
CN614 CN615
IC691 UPD4721GS
CN692
TELE ATLAS/DEBUG
IC603 TC7SH08FUS1
IC605 TC7SH08FUS1
X601 CSB1577 10.000MHz
EF731 EF732 EF733 EF734 EF735 EF736
CN731
K 1/2 CN1001
A 1/7
(MONITOR&HA POWER SUPPLY)
(AUDIO VIDEO)
RGB CONNECTOR 731-
EW model

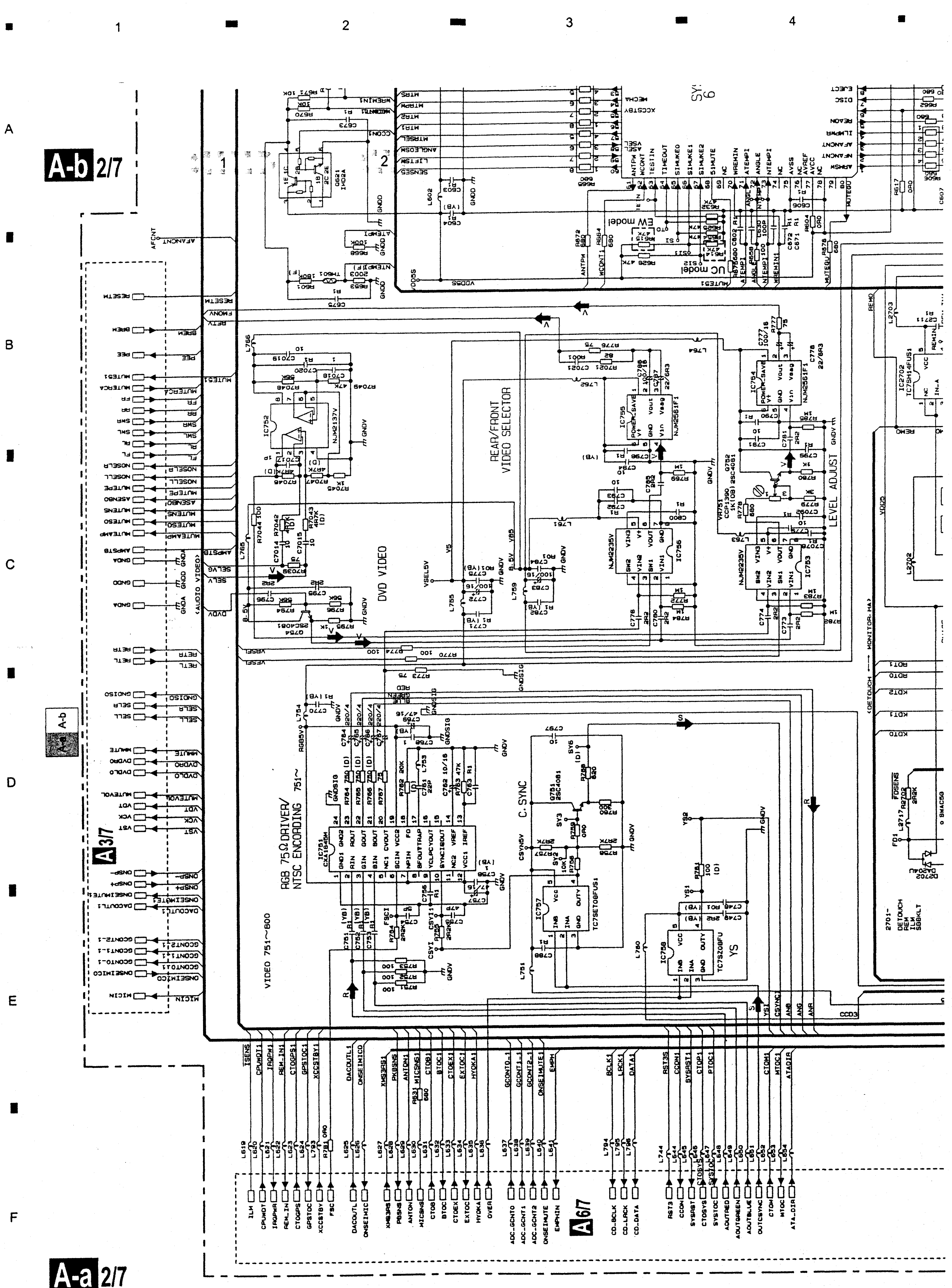
V Composite Video Signal

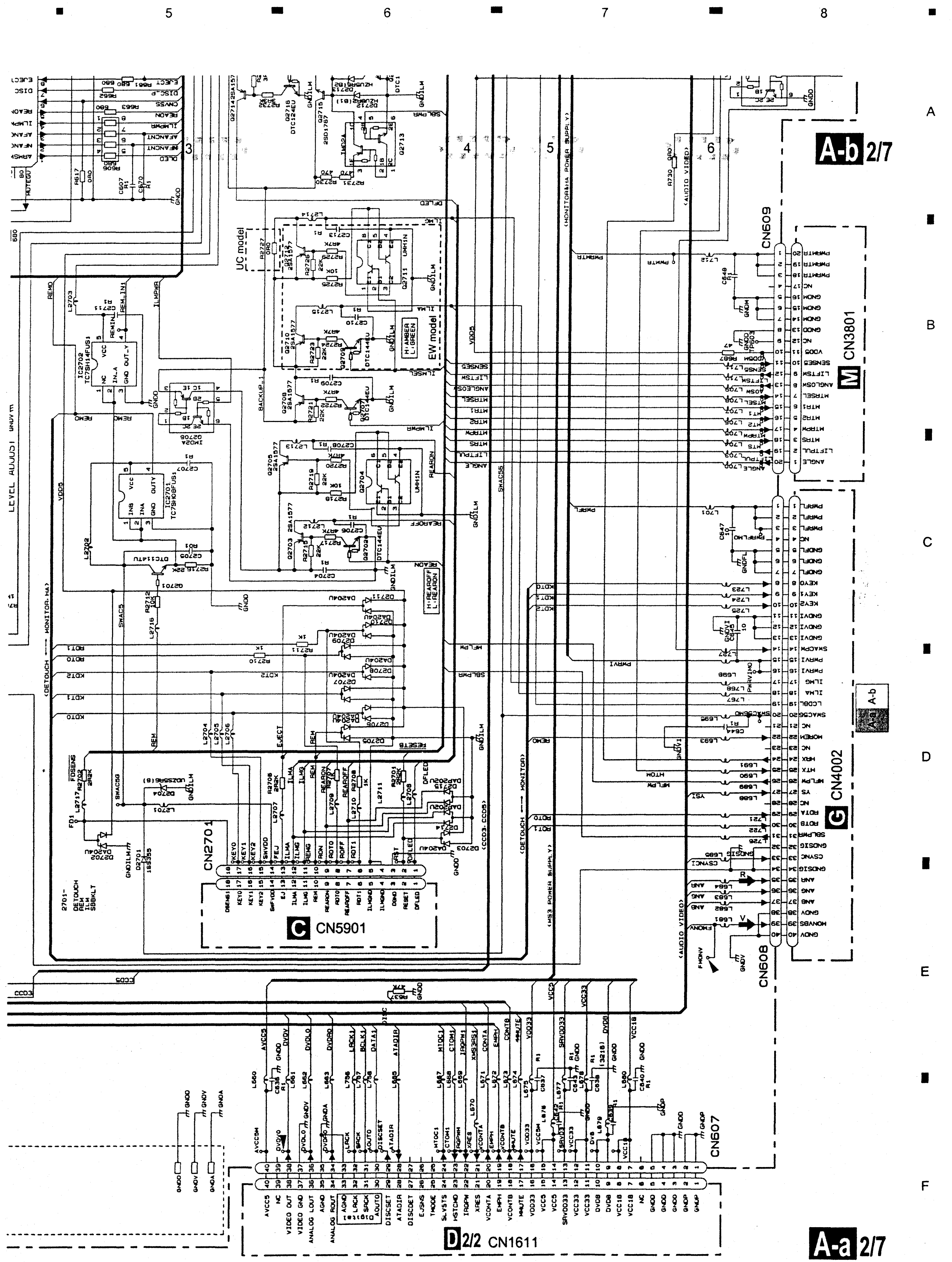
R RGB Signal

S SYNC Signal

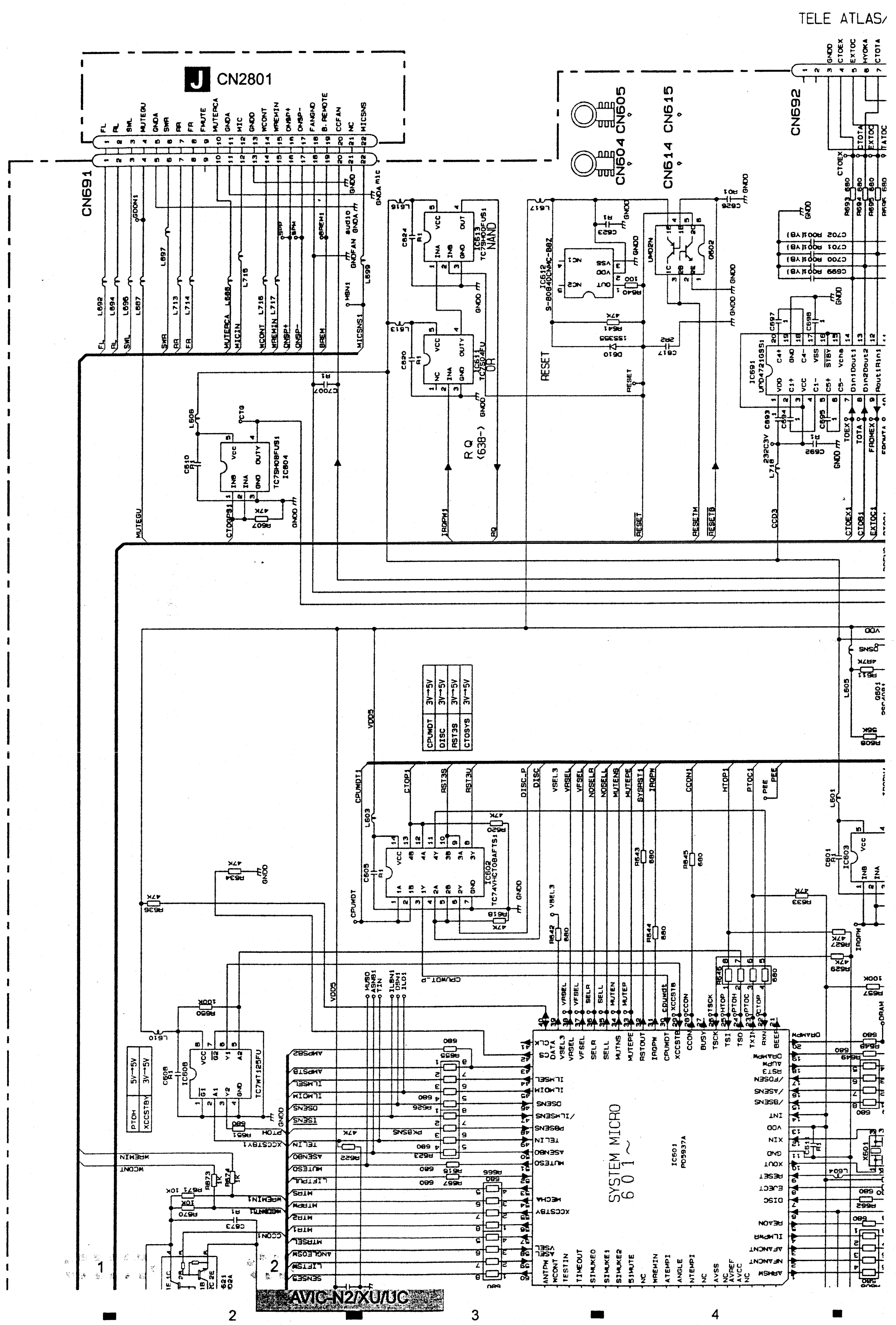
A Audio Signal

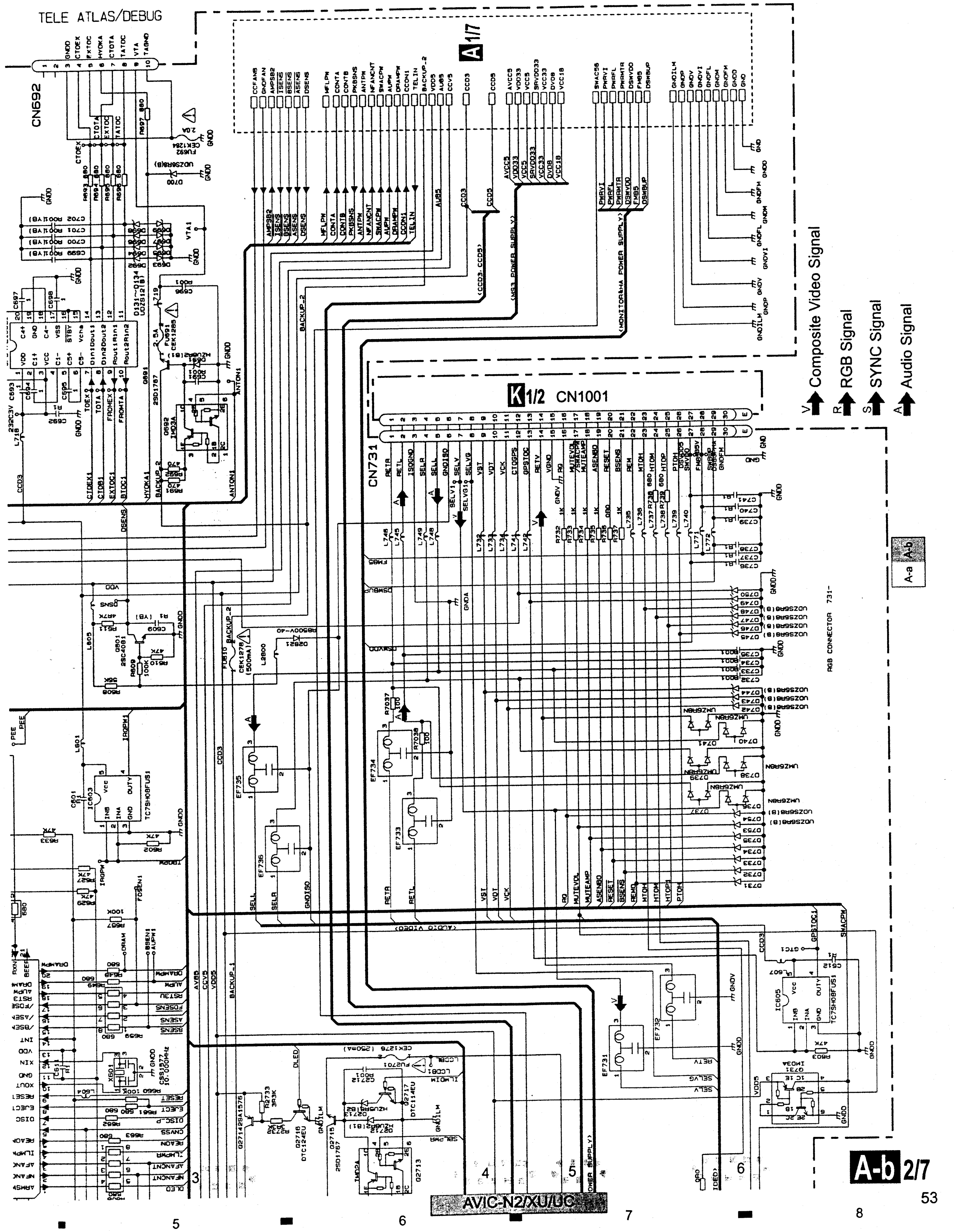
A 2/7


1
2
3
4
A
B
C
D
E
F
A-b 2/7
A 3/7
A 6/7
A-a 2/7
DVD VIDEO
REAR/FRONT VIDEO SELECTOR
LEVEL ADJUST
RGB 75Ω DRIVER/ NTSC ENCODING 751~
VIDEO 751~800
C.SYNC
YS
EW model
UC model
IC752 NJM2137V
IC755 NJM2235V
IC756 NJM2235V
IC753 NJM2235V
IC754 NJM2561F1
IC751 CXA1645M
IC757 TC7SET08FU
IC758 TC7S08FU


5
6
7
8
A
B
C
D
E
F
A-b 2/7
A-a 2/7
CN609
M CN3801
G CN4002
CN608
CN2701
C CN5901
D 2/2 CN1611
CN607
UC model
EW model
LEVEL ADJUST
IC2701 TC7SH08FUS1
IC2702 TC7SH08FUS1

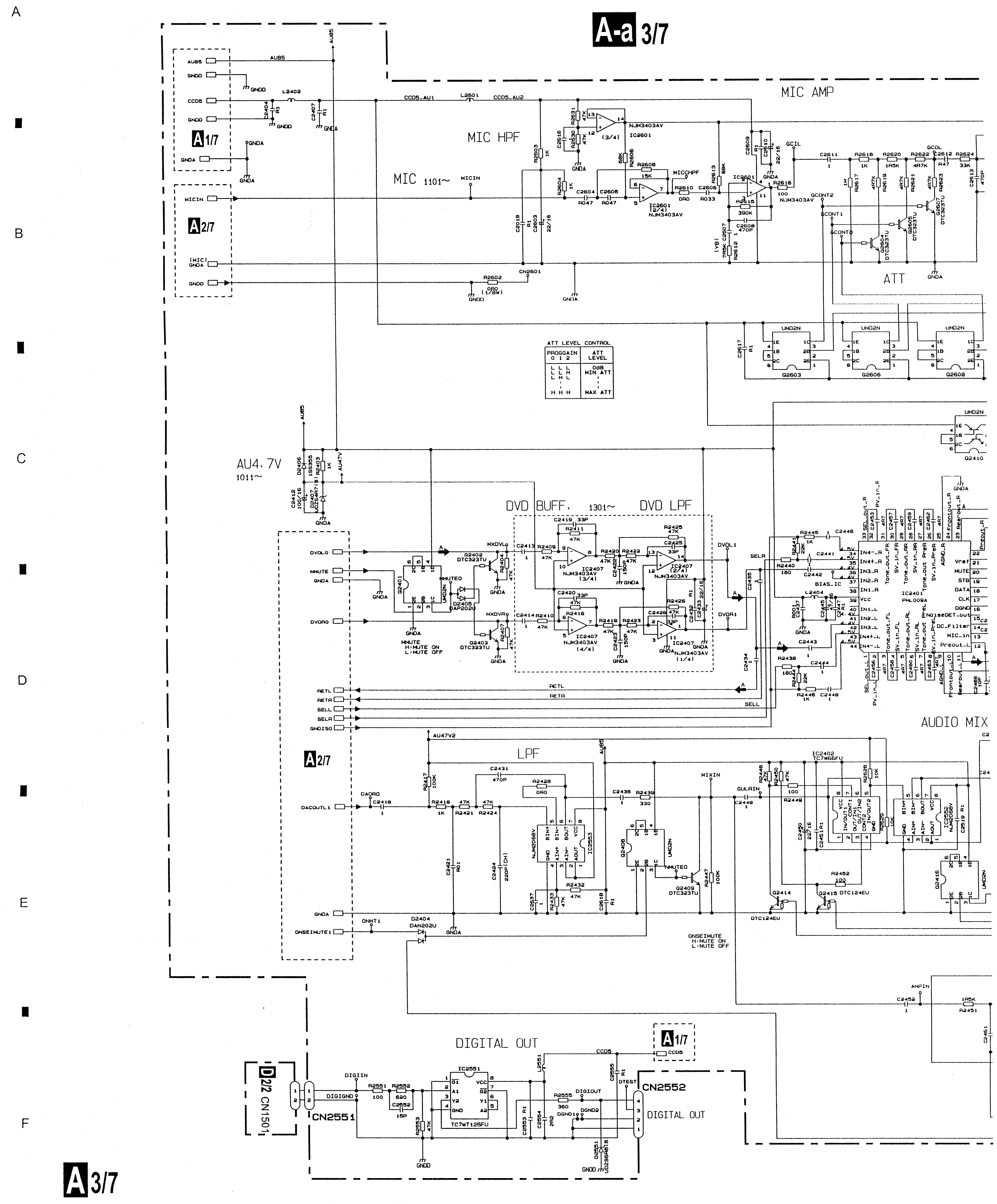
A 2/7 CC UNIT (SYSCOM, VIDEO, IF)


TELE ATLAS/
J CN2801
CN691
CN692
CN504 CN505
CN614 CN615
SYSTEM MICRO 601
IC601 PD5937A
IC602
IC603
IC604
IC605
IC606
IC610
IC612
IC613


TELE ATLAS/DEBUG
A 1/7
CN692
K 1/2 CN1001
CN731
RGB CONNECTOR 731-
IC605
IC731
EF731
EF732
EF733
EF734
EF735
EF736
V Composite Video Signal
R RGB Signal
S SYNC Signal
A Audio Signal

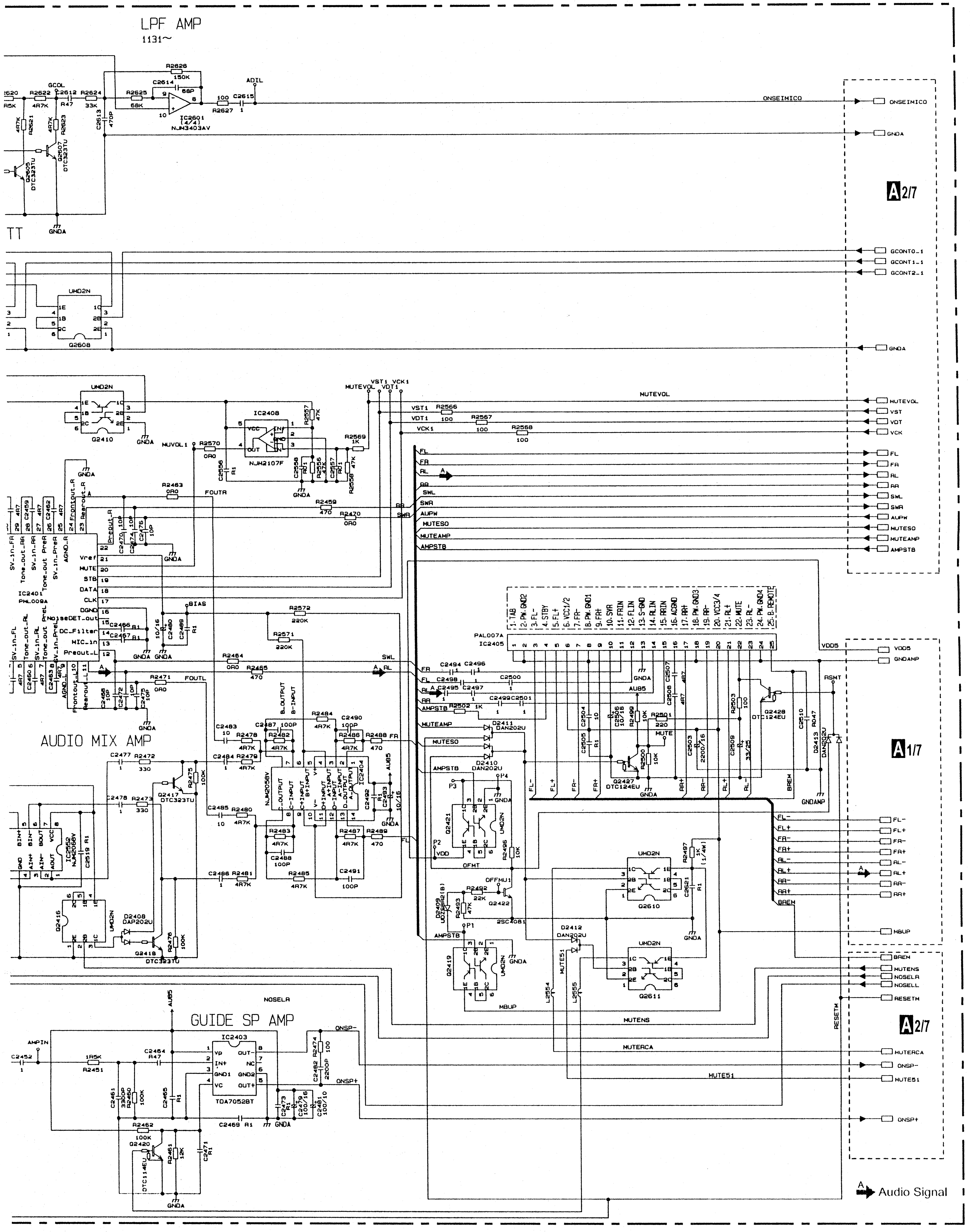
A-b 2/7

3.5 CC UNIT (AUDIO)(GUIDE PAGE)

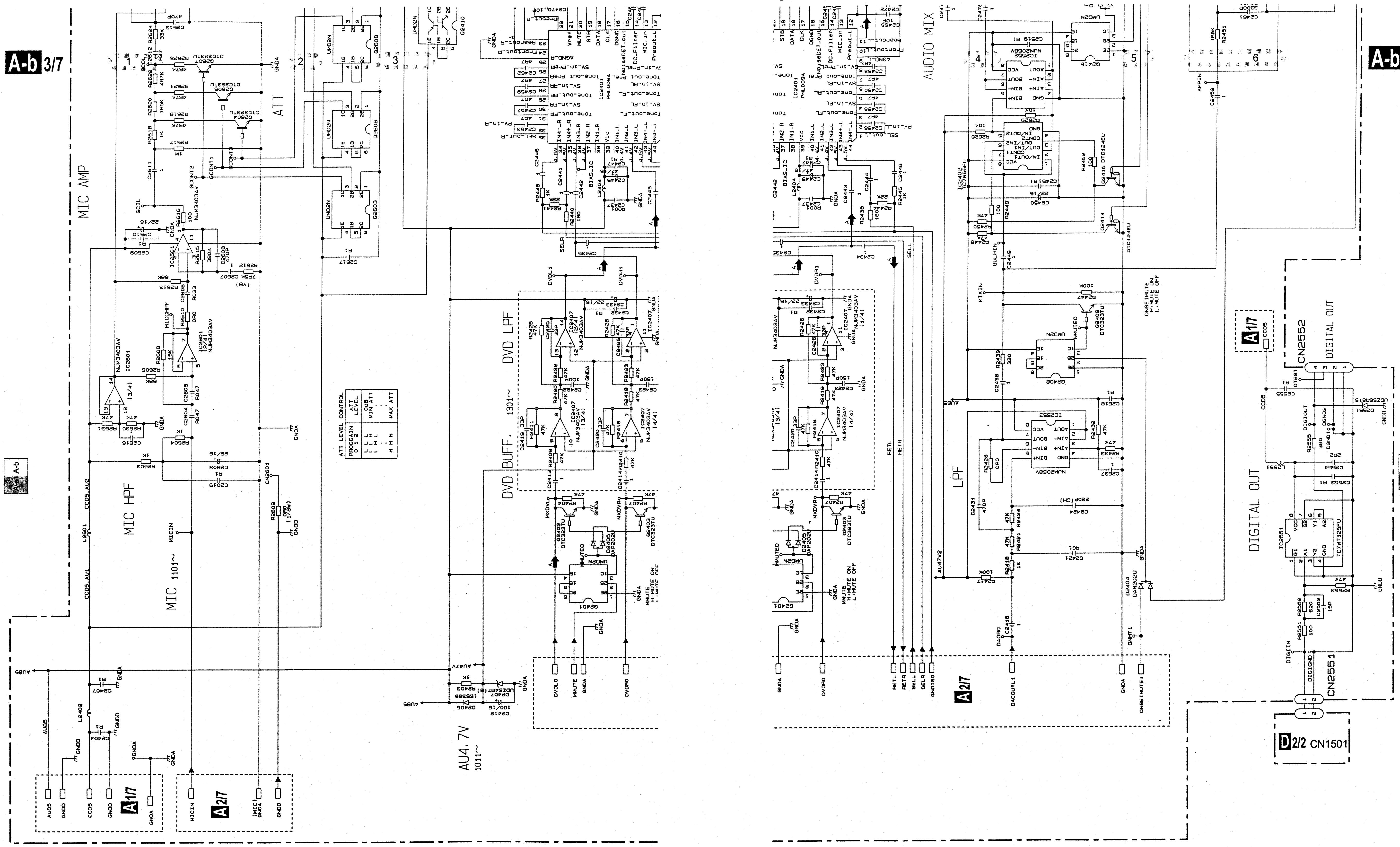

A
B
C
D
E
F
A-a 3/7
MIC AMP
MIC HPF
MIC 1101~
ATT
ATT LEVEL CONTROL
AU4.7V 1011~
DVD BUFF. 1301~
DVD LPF
LPF
AUDIO MIX
DIGITAL OUT
A 1/7
A 2/7
D 2/2 CN1501
CN2551
CN2552
A 3/7

A-b 3/7

A 3/7 CC UNIT (AUDIO)


LPF AMP
IC2601 (4/4) NJM3403AV
ONSEIMICO
GNDA
A 2/7
GCONT0_1
GCONT1_1
GCONT2_1
UMD2N
Q2608
Q2410
IC2408 NJM2107F
MUTEVOL
VST
VDT
VCK
FL
FR
RL
RR
SWL
SWR
AUPW
MUTESO
MUTEAMP
AMPSTB
IC2401 PML009A
AUDIO MIX AMP
NJM2058V
IC2404
PAL007A IC2405
1.TAB
2.PW_GND2
3.FL-
4.STBY
5.FL+
6.VCC1/2
7.FR-
8.PW_GND1
9.FR+
10.SVR
11.FRIN
12.FLIN
13.S-GND
14.RLIN
15.RRIN
16.ACGND
17.RR+
18.PW_GND3
19.RR-
20.VCC3/4
21.RL+
22.MUTE
23.RL-
24.PW_GND4
25.B_REMOTE
VDD5
GNDAMP
A 1/7
FL-
FL+
FR-
FR+
RL-
RL+
RR-
RR+
MBUP
BREM
MUTENS
NOSELR
NOSELL
RESETM
Q2610
Q2611
Q2427 DTC124EU
Q2428 DTC124EU
GUIDE SP AMP
IC2403 TDA7052BT
NOSELA
AMPIN
ONSP-
ONSP+
MUTERCA
MUTE51
Audio Signal

A-b 3/7

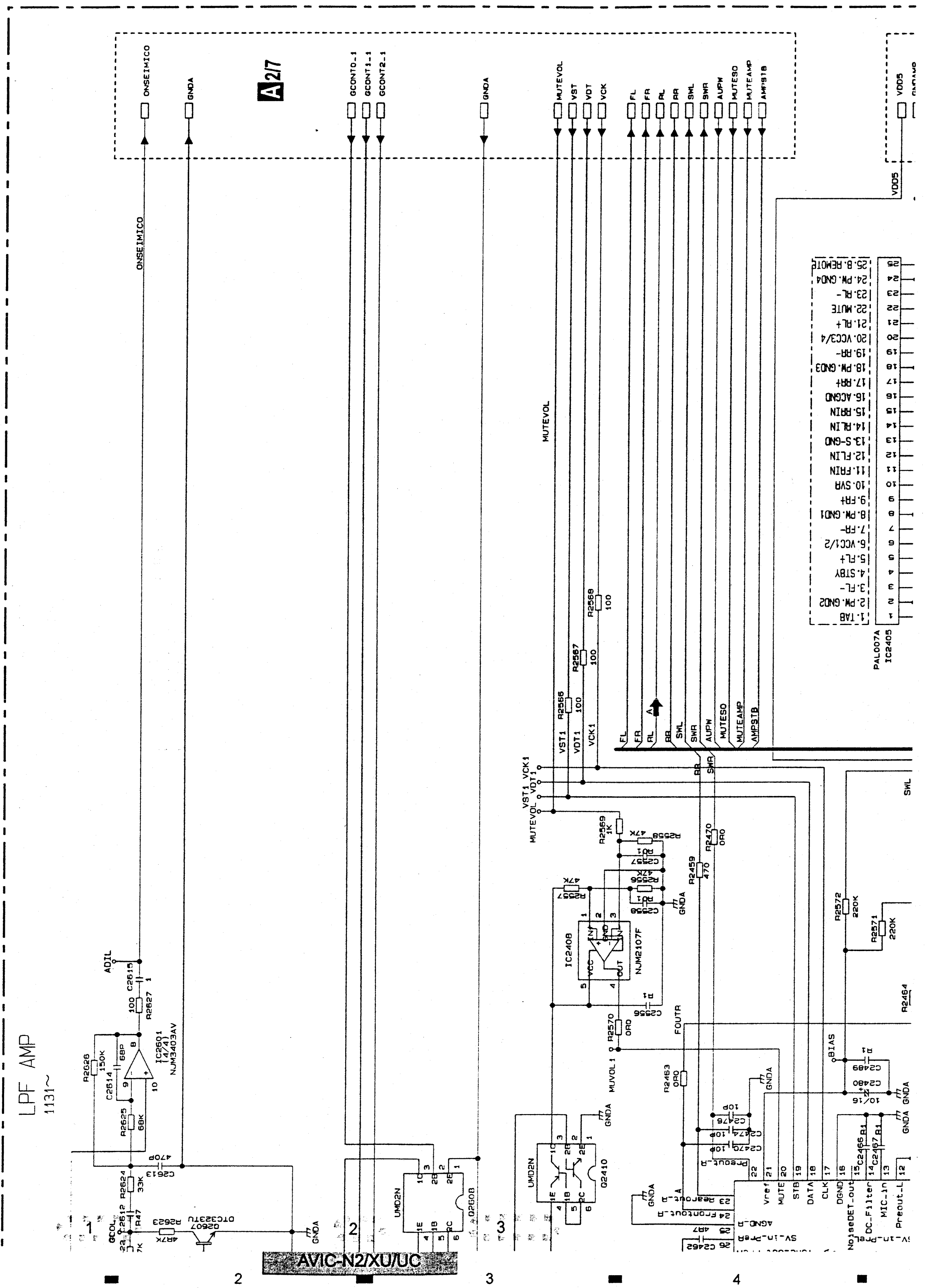

MIC AMP
ATT
MIC HPF
MIC 1101~
DVD BUFF.
DVD LPF 1301~
AU4.7V 1011~
AUDIO MIX
LPF
DIGITAL OUT
CN2552
CN2551
D 2/2 CN1501
A 1/7
A 2/7
IC2601 NJM3403AV
IC2407 NJM3403AV
IC2401 PML009A
IC2402 TC7W66FU
IC2552 NJM2068V
IC2553 NJM2068V
IC2551 TC7WT125FU
Q2602 DTC323TU
Q2603 DTC323TU
Q2604 DTC323TU
Q2402 DTC323TU
Q2403 DTC323TU
Q2405 DAP202U
Q2409 DTC323TU
Q2414 DTC124EU
Q2415 DTC124EU
D2404 DAN202U
AUB5
AU47V
GNDA
GNDD
CCD5
MICIN
DVDLO
DVDRO
MMUTE
RETL
RETR
SELL
SELR
DACOUTL1
GNSEIMUTE1
DIGIN
DIGIGND
MMUTE ON H:MUTE ON L:MUTE OFF
GNSEIMUTE H:MUTE ON L:MUTE OFF

ATT LEVEL CONTROL

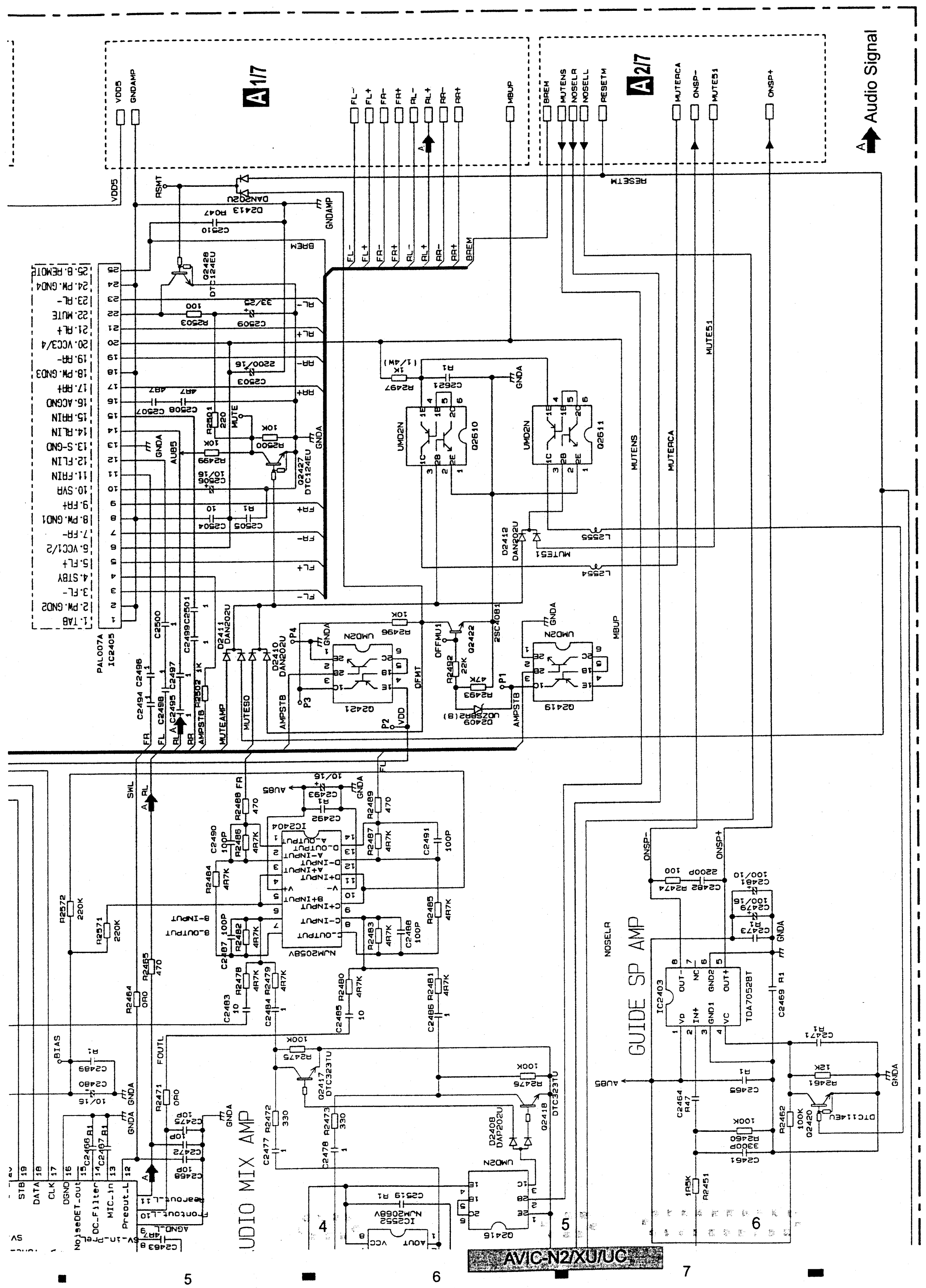
PROGGAIN 0 1 2	ATT LEVEL
L L L	0dB MIN ATT
L L H	:
L H L	:
H H H	MAX ATT

A-a 3/7

A 3/7 CC UNIT (AUDIO)

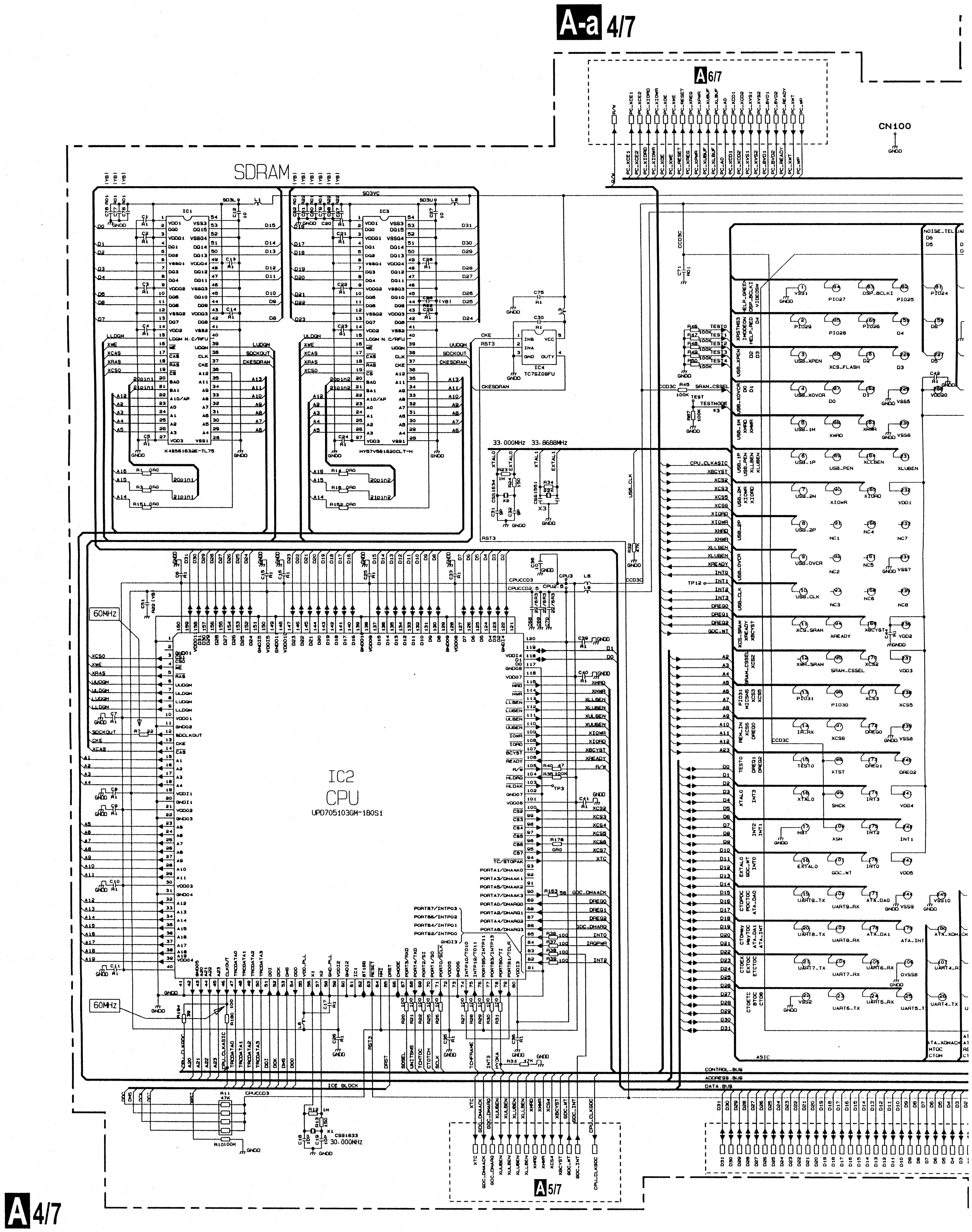


A 2/7
ONSEIMICO
GNDA
GCONT0_1
GCONT1_1
GCONT2_1
MUTEVOL
VST
VDT
VCK
FL
FR
RL
RR
SWL
SWR
AUFN
MUTESO
MUTEAMP
AMPSTB
VDD5
PAL007A
IC2405
1.TAB
2.PW.GND2
3.FL-
4.STBY
5.FL+
6.VCC1/2
7.FR-
8.PW.GND1
9.FR+
10.SVR
11.FRIN
12.FLIN
13.S-GND
14.RLIN
15.RRIN
16.ACGND
17.RR+
18.PW.GND3
19.RR-
20.VCC3/4
21.RL+
22.MUTE
23.RL-
24.PW.GND4
25.B.REMOTE
IC2408
NJM2107F
IC2501
NJM3403AV
LPF AMP
1131~
UMD2N
Q2410
Q2607
OTC323TU
ADIL
BIAS
FOUTR
MUVOL1

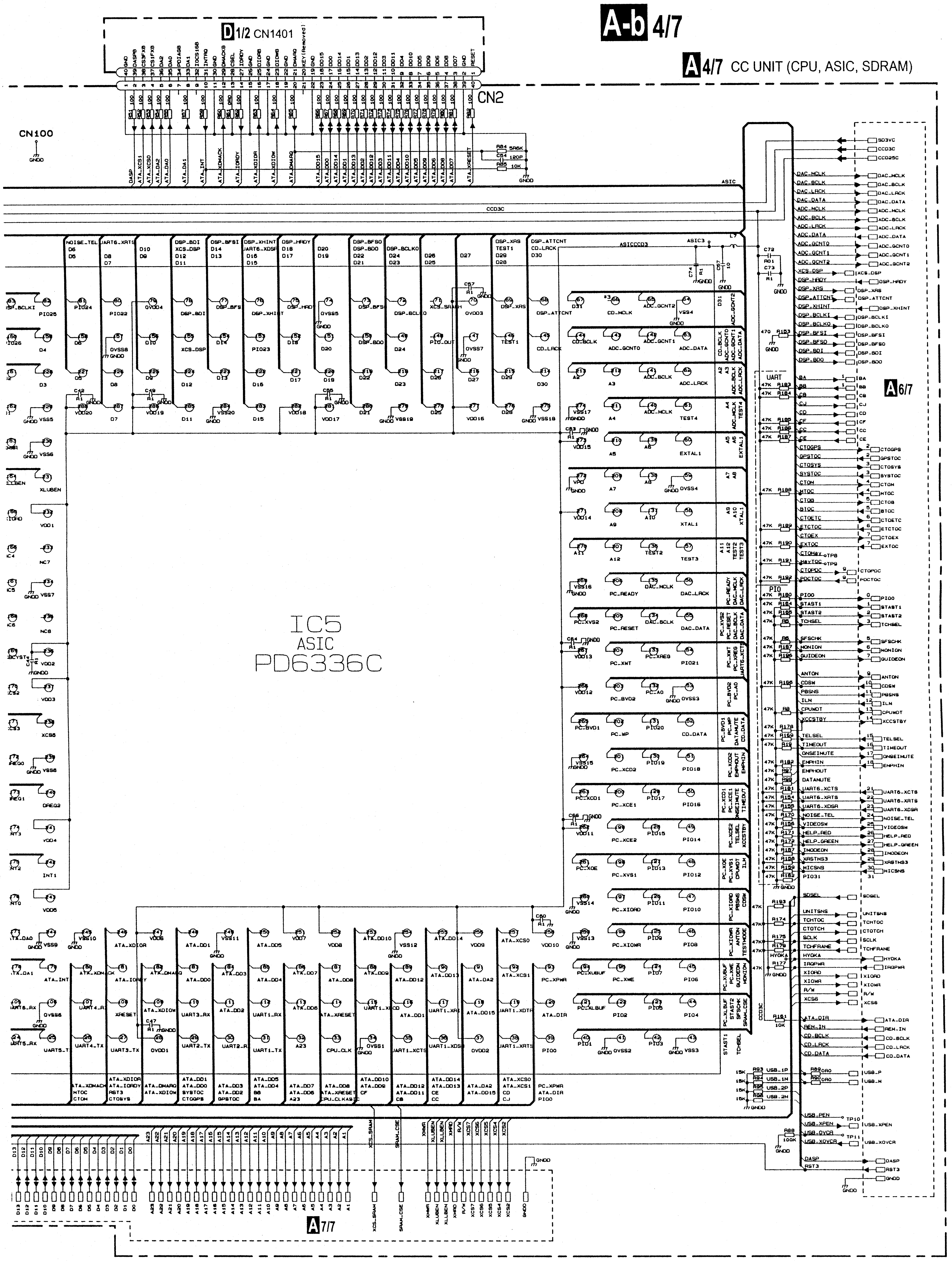


A 1/7
A 2/7
Audio Signal
VDD5
GNDAMP
FL-
FL+
FR-
FR+
RL-
RL+
RR-
RR+
MBUP
BREM
MUTENS
NOSELR
NOSELL
RESETM
MUTERCA
ONSP-
MUTE51
ONSP+
PAL007A
IC2405
Q2426
DTC124EU
Q2427
DTC124EU
Q2610
Q2611
UMD2N
D2412
DAN202U
D2411
DAN202U
D2410
DAN202U
Q2421
Q2422
2SC4081
Q2419
IC2404
NJM2058V
IC2403
TDA7052BT
GUIDE SP AMP
AUDIO MIX AMP
Q2417
DTC323TU
Q2418
DTC323TU
Q2416
Q2420
DTC114EU
D2408
DAP202U
IC2552
NJM2068V
AUB5
FOUTL
BIAS

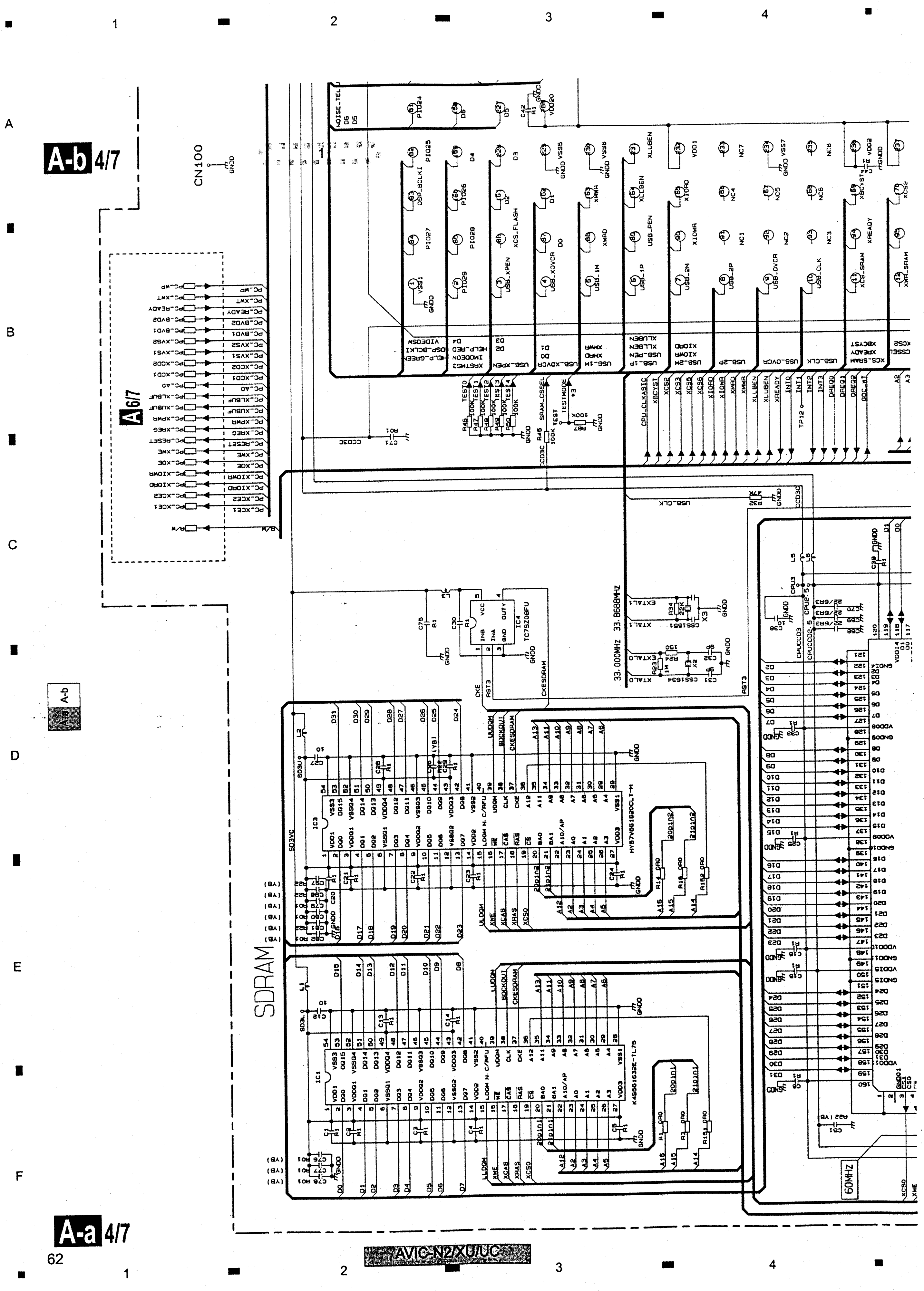
3.6 CC UNIT (CPU, ASIC, SDRAM)(GUIDE PAGE)

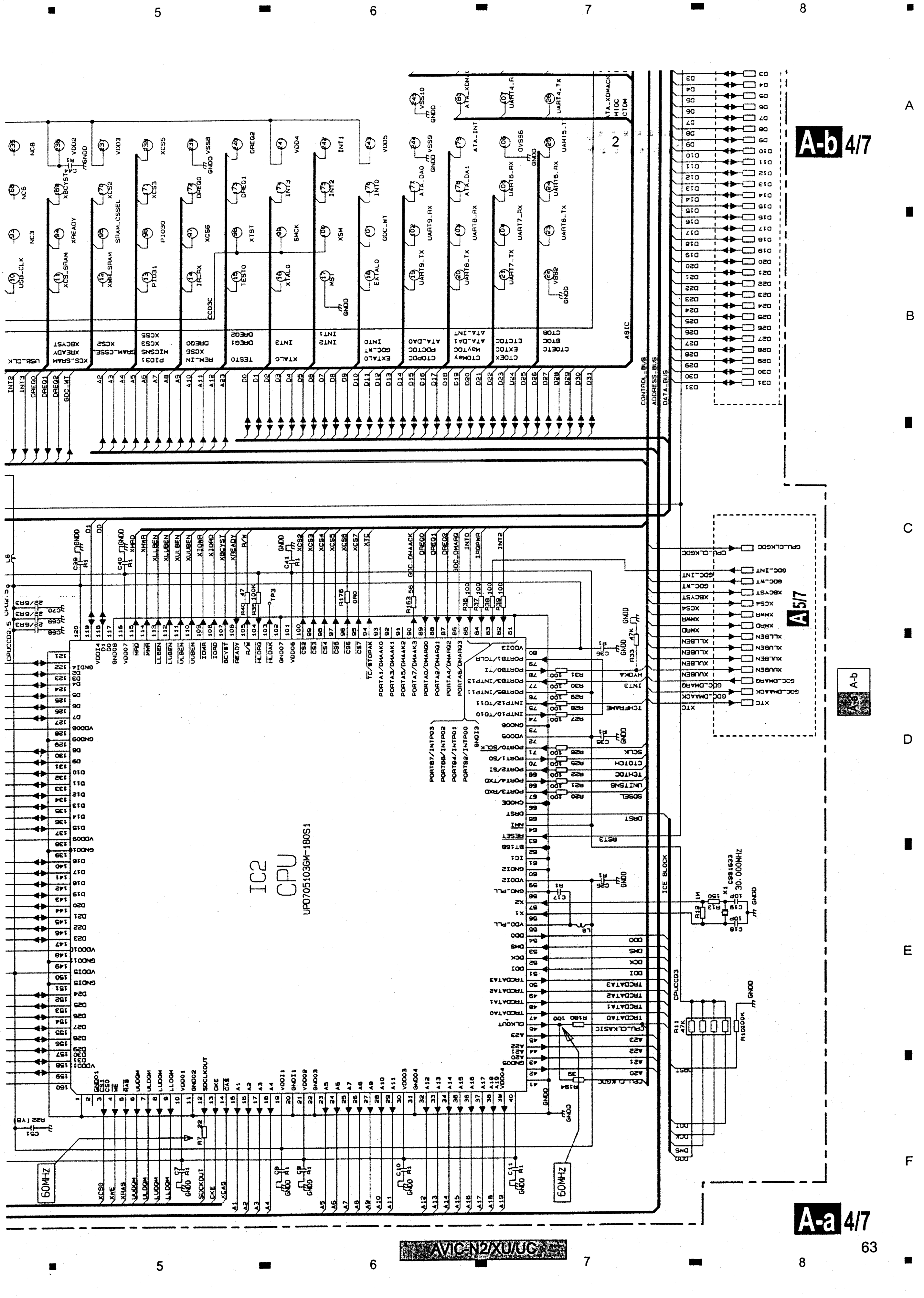

A-a 4/7
A 6/7
CN100
SDRAM
IC1
K4S561632E-TL75
IC3
HY57V561620CLT-H
IC4
TC7SZ08FU
33.000MHz
33.8688MHz
X2
X3
60MHz
IC2
CPU
UPD705103GM-180S1
X1
CSS1633
30.000MHz
ICE BLOCK
CONTROL_BUS
ADDRESS_BUS
DATA_BUS
ASIC
A 5/7
A 4/7

A-b 4/7

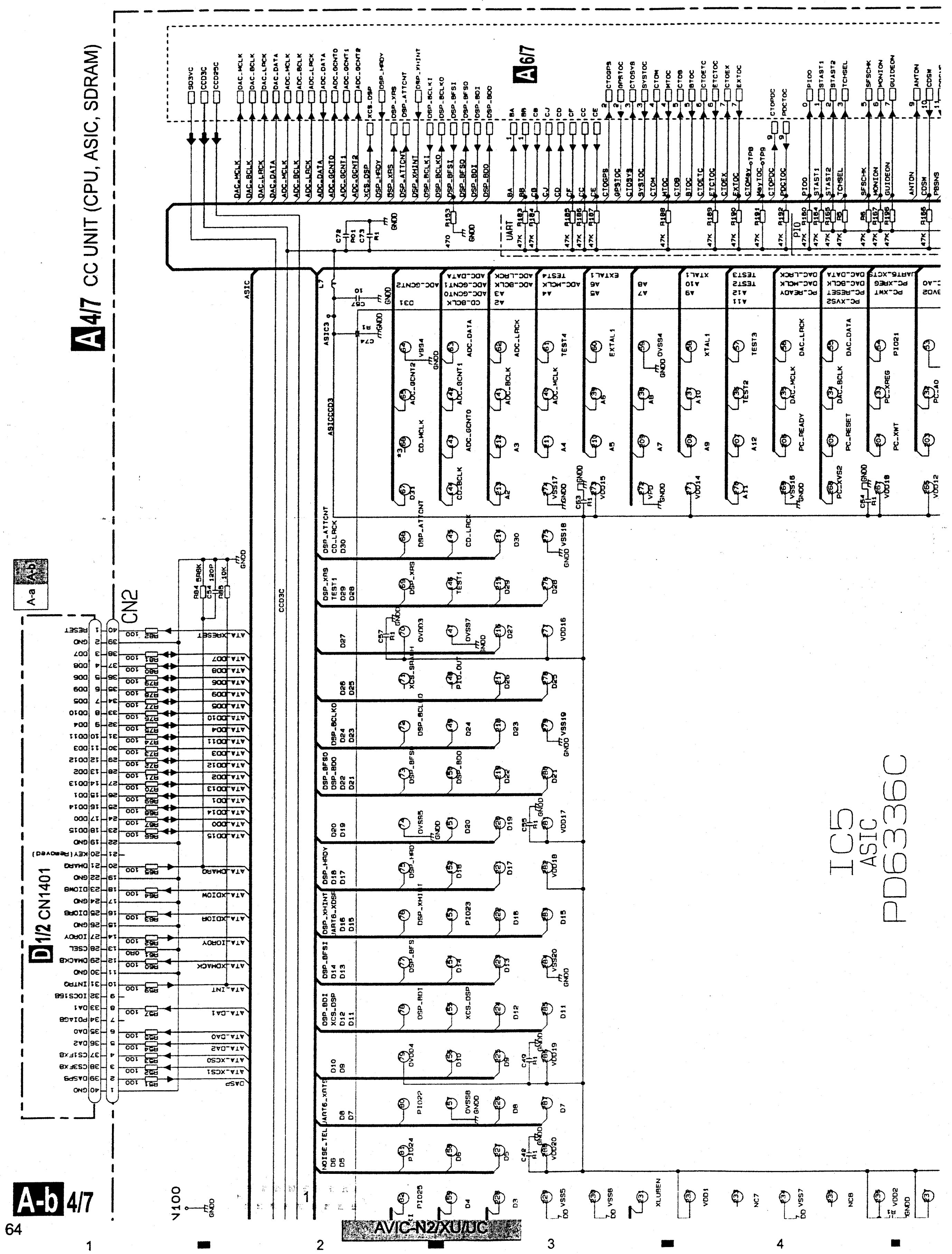

A 4/7 CC UNIT (CPU, ASIC, SDRAM)
D 1/2 CN1401
CN2
CN100
GNDD
ASIC
CCD3C
ASICCCD3
ASIC3
L7
IC5
ASIC
PD6336C
UART
PIO
A 6/7
A 7/7
ATA_DIR
REM_IN
CD_BCLK
CD_LRCK
CD_DATA
USB_P
USB_N
USB_XPEN
USB_XOVCR
DASP
RST3
TP10
TP11
DAC_MCLK
DAC_BCLK
DAC_LRCK
DAC_DATA
ADC_MCLK
ADC_BCLK
ADC_LRCK
ADC_DATA
ADC_GCNT0
ADC_GCNT1
ADC_GCNT2
XCS_DSP
DSP_HRDY
DSP_XRS
DSP_ATTCNT
DSP_XHINT
DSP_BCLKI
DSP_BCLKO
DSP_BFSI
DSP_BFSO
DSP_BDI
DSP_BDO
SD3VC
CCD3C
CCD25C

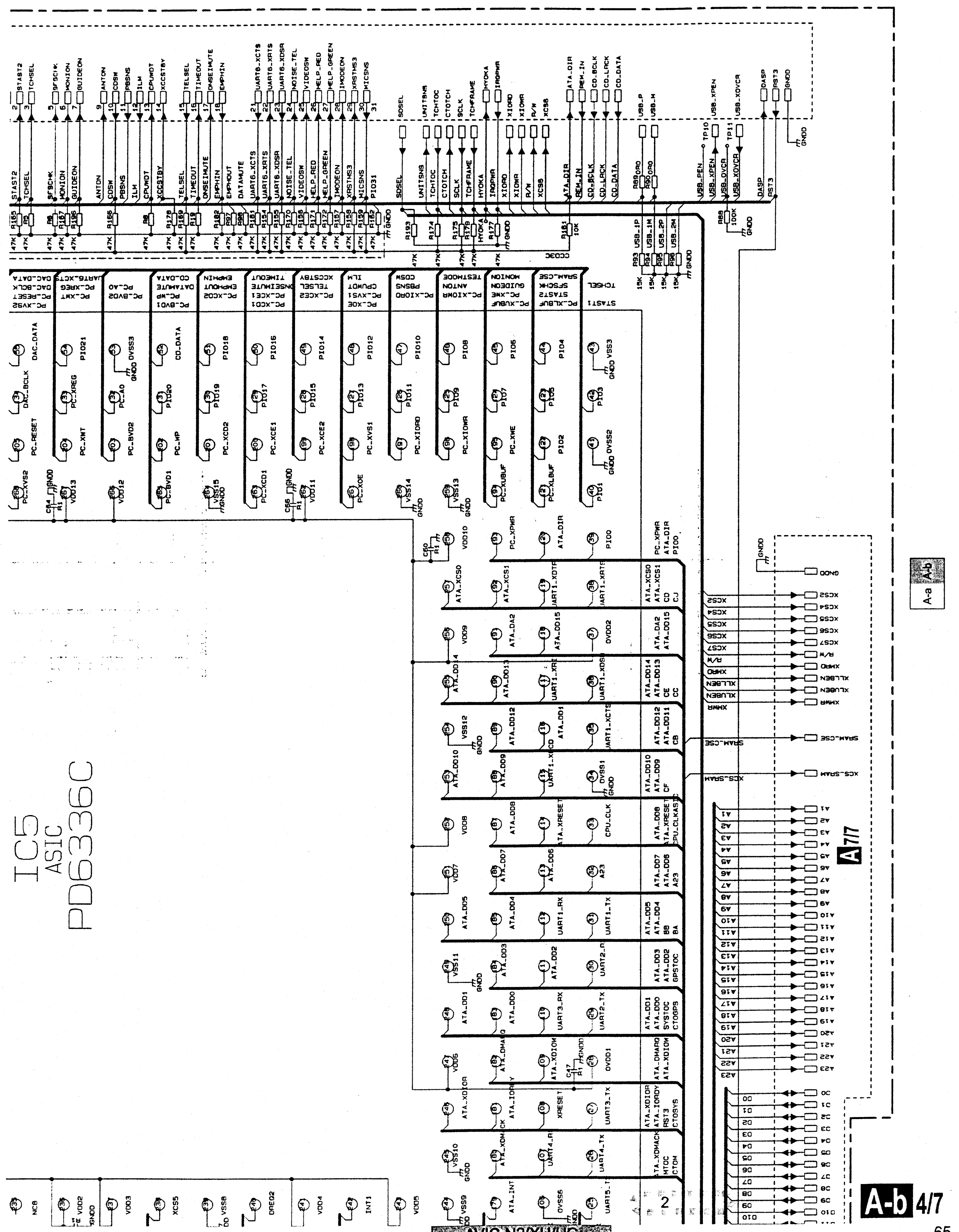
A 4/7


A-b 4/7
CN100
A 6/7
SDRAM
IC3
HY57V561620CLT-H
IC1
K4S561632E-TL75
IC4
TC7SZ08FU
X3
CSS1634
33.000MHz
33.8688MHz
60MHz
A-a 4/7
1
2
3
4
A
B
C
D
E
F


A-b 4/7
IC2
CPU
UPD70510GM-180S1
A 5/7
X1
CSB1633
30.000MHz
CONTROL BUS
ADDRESS BUS
DATA BUS
ICE BLOCK
ASIC
60MHz
A-a 4/7
5
6
7
8
A
B
C
D
E
F

A 4/7 CC UNIT (CPU, ASIC, SDRAM)

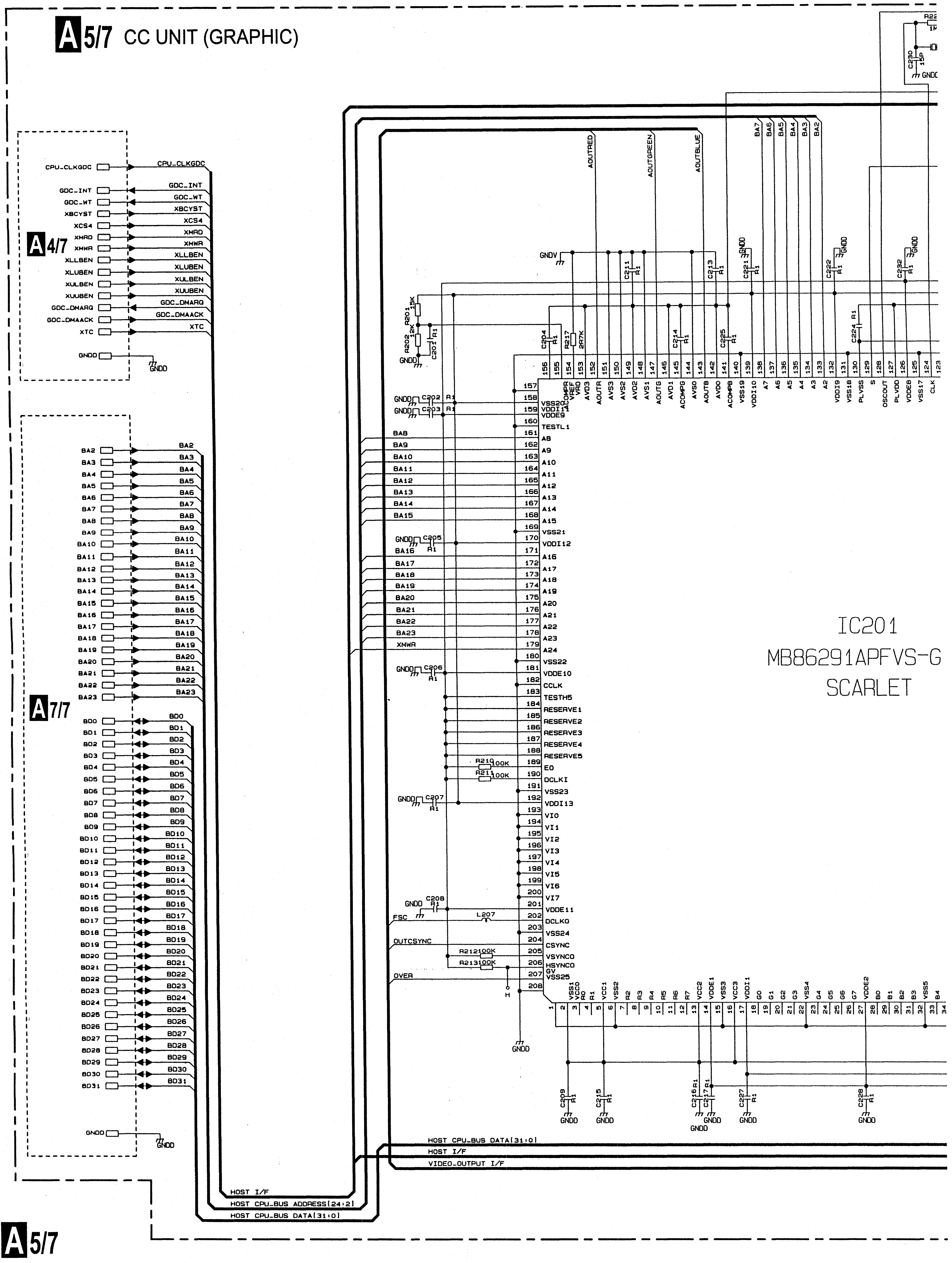

A 6/7
IC5
ASIC
PD6336C
CN2
D 1/2 CN1401
A-a A-b
ASIC
CCD3C
ASICCCD3
UART

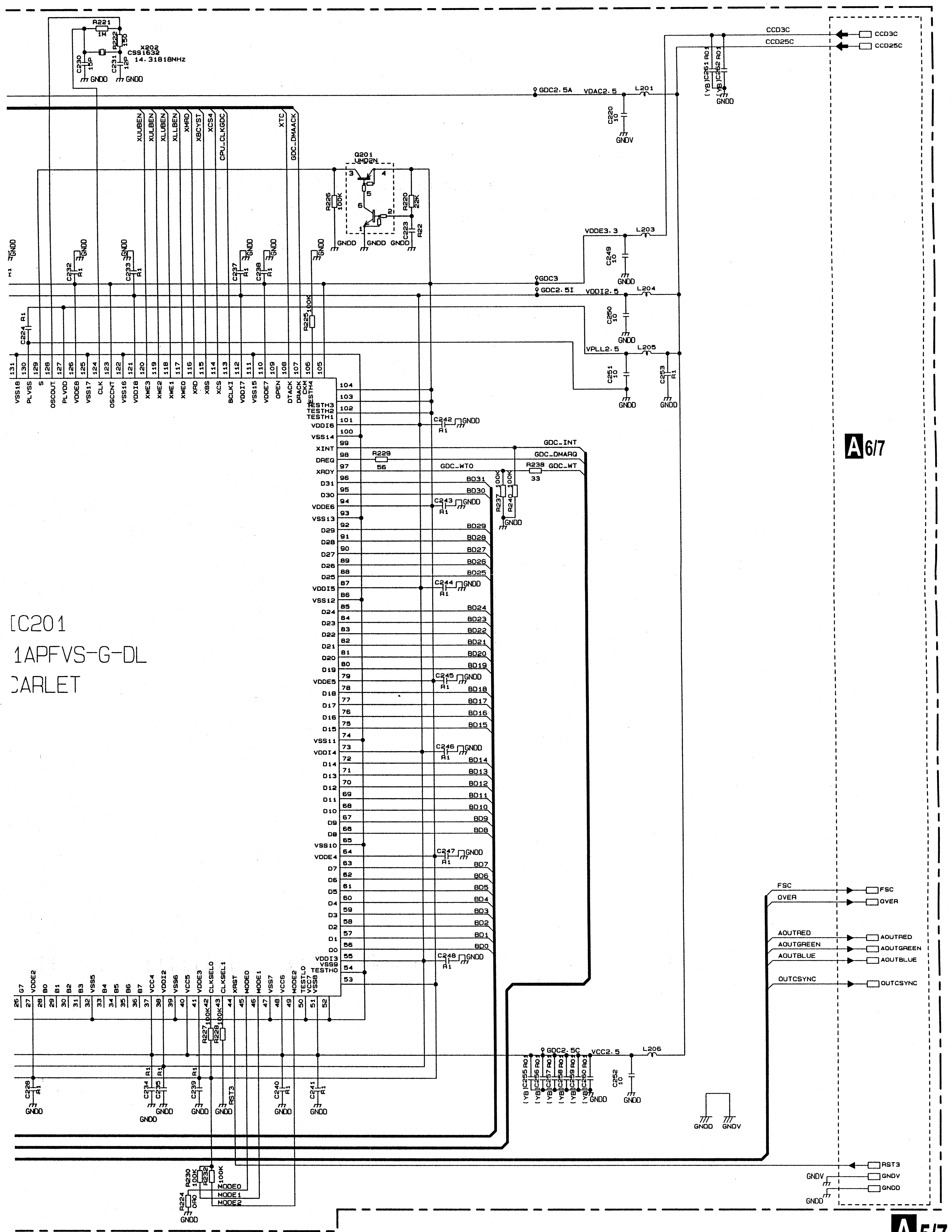

IC5
ASIC
PD6336C
A 7/7
A-a A-b
CCD3C

A-b 4/7

A-b 4/7

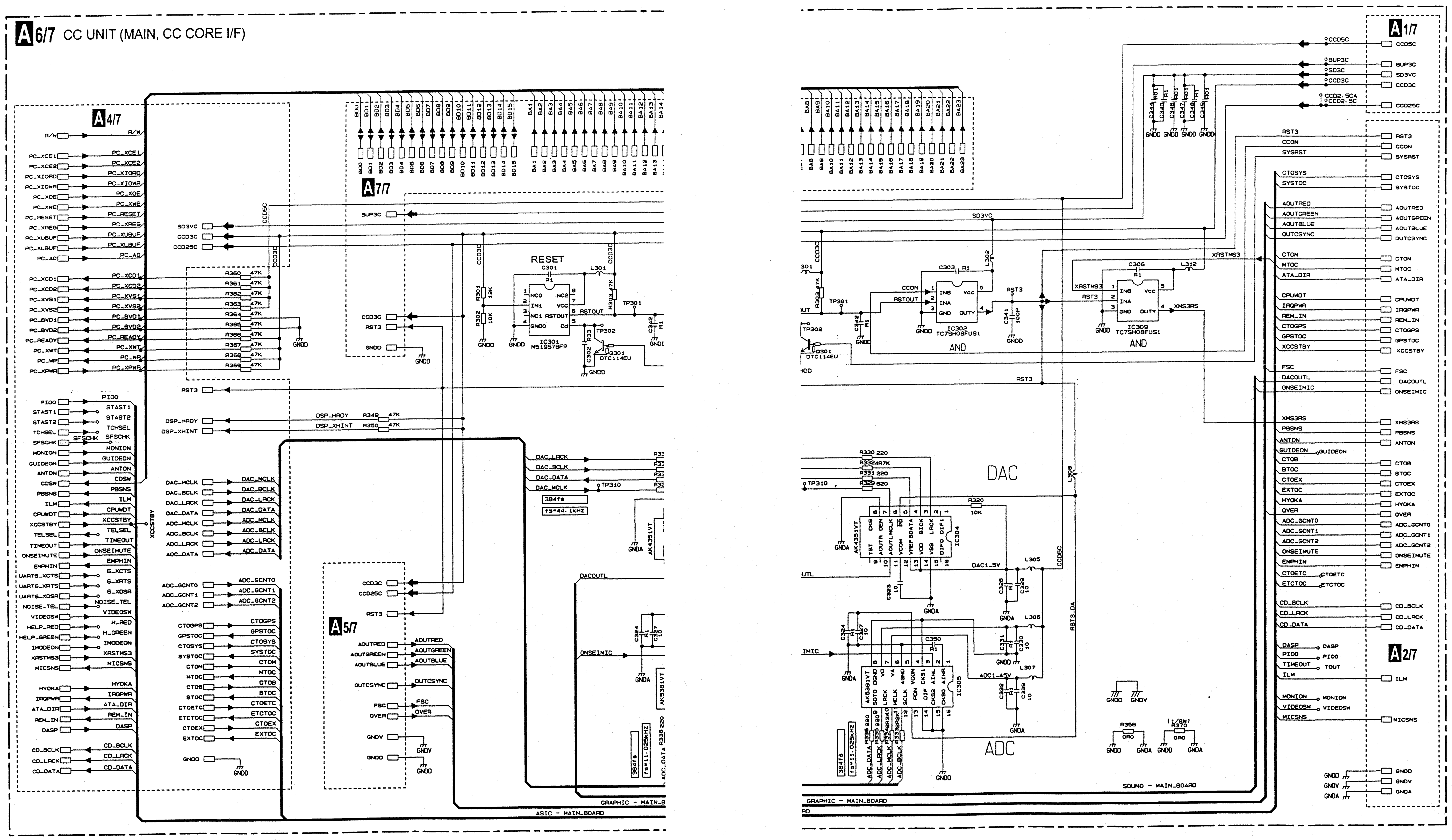
3.7 CC UNIT (GRAPHIC)


A 5/7 CC UNIT (GRAPHIC)
A 4/7
CPU_CLKGDC
GDC_INT
GDC_WT
XBCYST
XCS4
XMRD
XMWR
XLLBEN
XLUBEN
XULBEN
XUUBEN
GDC_DMARQ
GDC_DMAACK
XTC
GNDD
A 7/7
BA2 … BA23
BD0 … BD31
HOST I/F
HOST CPU_BUS ADDRESS[24:2]
HOST CPU_BUS DATA[31:0]
VIDEO_OUTPUT I/F
AOUTRED
AOUTGREEN
AOUTBLUE
GNDV
R201 15K
R202 12K
C201
R217 2R7K
C204
C211
C213
C214
C221
C222
C224
C225
C230 15P
C232
C202
C203
C205
C206
C207
C208
C209
C215
C216
C217
C227
C228
R210 100K
R211 100K
R212 100K
R213 100K
L207
FSC
OUTCSYNC
OVER
XMWR
IC201
MB86291APFVS-G
SCARLET
VSS20
VDDI11
VDDE9
TESTL1
A8 … A24
VSS21
VDDI12
VSS22
VDDE10
CCLK
TESTH5
RESERVE1
RESERVE2
RESERVE3
RESERVE4
RESERVE5
E0
DCLKI
VSS23
VDDI13
VI0 … VI7
VDDE11
DCLKO
VSS24
CSYNC
VSYNCO
HSYNCO
GV
VSS25
AVD3
AOUTR
AVS3
AVS2
AVD2
AVS1
AOUTG
AVD1
ACOMPG
AVS0
AOUTB
AVD0
ACOMPB
VSS19
VDDI10
VDDI9
VSS18
PLVSS
S
OSCOUT
PLVDD
VDDE8
VSS17
CLK
VSS1
VCC0
R0
R1
VCC1
VSS2
R2 … R7
VCC2
VDDE1
VSS3
VCC3
VDDI1
G0 … G7
VSS4
VDDE2
B0 … B4
VSS5

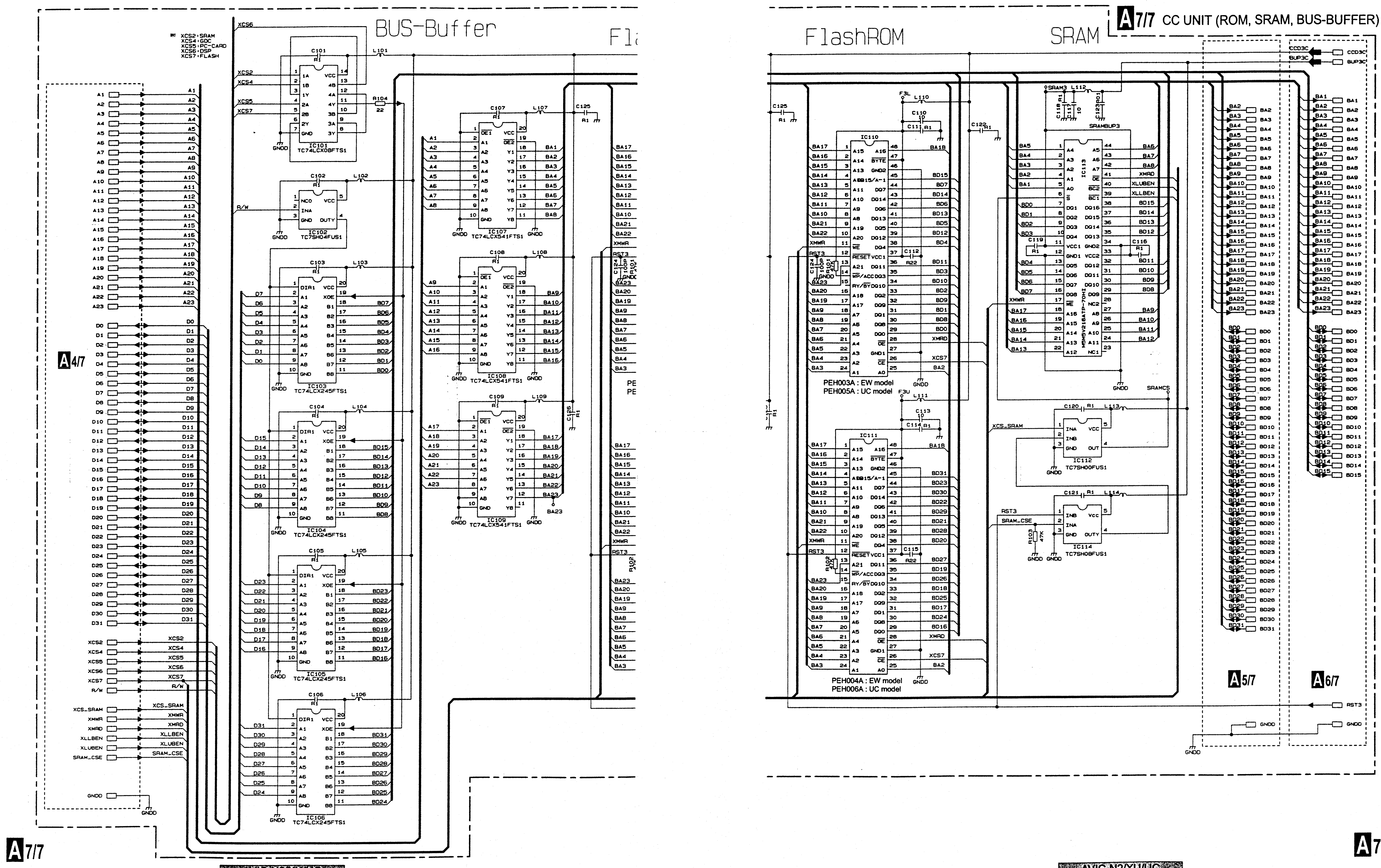

A
B
C
D
E
F
IC201
1APFVS-G-DL
CARLET
R221 1M
R222 150
X202 CSS1632 14.31818MHz
C230 15P
C231 12P
GNDD
GDC2.5A
VDAC2.5
L201
C220 10
GNDV
CCD3C
CCD25C
C261 R01 (YB)
C262 R01 (YB)
XUUBEN
XULBEN
XLUBEN
XLLBEN
XWRD
XBCYST
XCS4
CPU_CLKGDC
XTC
GDC_DMAACK
Q201 UMD2N
R226 100K
R220 22K
C223 R22
VDDE3.3
L203
C249 10
GDC3
GDC2.5I
VDDI2.5
L204
C250 10
VPLL2.5
L205
C251 10
C253 R1
C224 R1
C232 R1
C233 R1
C237 R1
C238 R1
R225 100K
VSS18 PLVSS S OSCOUT PLVDD VDDE8 VSS17 CLK OSCCNT VSS16 VDDI8 XWE3 XWE2 XWE1 XWE0 XRD XBS XCS BCLKI VDDI7 VSS15 VDDE7 OPEN DTACK DRACK CKM TESTH4
TESTH3 TESTH2 TESTH1 VDDI6 VSS14 XINT DREQ XRDY
C242 R1
GDC_INT
GDC_DMARQ
R229 56
GDC_WTO
R238 33
GDC_WT
R237 100K
R240 100K
C243 R1
C244 R1
C245 R1
C246 R1
C247 R1
C248 R1
D31 D30 VDDE6 VSS13 D29 D28 D27 D26 D25 VDDI5 VSS12 D24 D23 D22 D21 D20 D19 VDDE5 D18 D17 D16 D15 VSS11 VDDI4 D14 D13 D12 D11 D10 D9 D8 VSS10 VDDE4 D7 D6 D5 D4 D3 D2 D1 D0 VDDI3 VSS9 TESTH0
BD31 BD30 BD29 BD28 BD27 BD26 BD25 BD24 BD23 BD22 BD21 BD20 BD19 BD18 BD17 BD16 BD15 BD14 BD13 BD12 BD11 BD10 BD9 BD8 BD7 BD6 BD5 BD4 BD3 BD2 BD1 BD0
G7 VDDE2 B0 B1 B2 B3 VSS5 B4 B5 B6 B7 VCC4 VDDI2 VSS6 VCC5 VDDE3 CLKSEL0 CLKSEL1 XRST MODE0 MODE1 VSS7 VCC6 MODE2 TESTL0 VCC7 VSS8
R227 100K
R228 100K
C228 R1
C234 R1
C235 R1
C239 R1
C240 R1
C241 R1
RST3
R230 100K
R231 100K
R224 0R0
MODE0
MODE1
MODE2
GDC2.5C
VCC2.5
L206
C252 10
C255 R01 (YB)
C256 R01 (YB)
C257 R01 (YB)
C258 R01 (YB)
C259 R01 (YB)
C260 R01 (YB)
GNDV
FSC
OVER
AOUTRED
AOUTGREEN
AOUTBLUE
OUTCSYNC
A 6/7

A 5/7

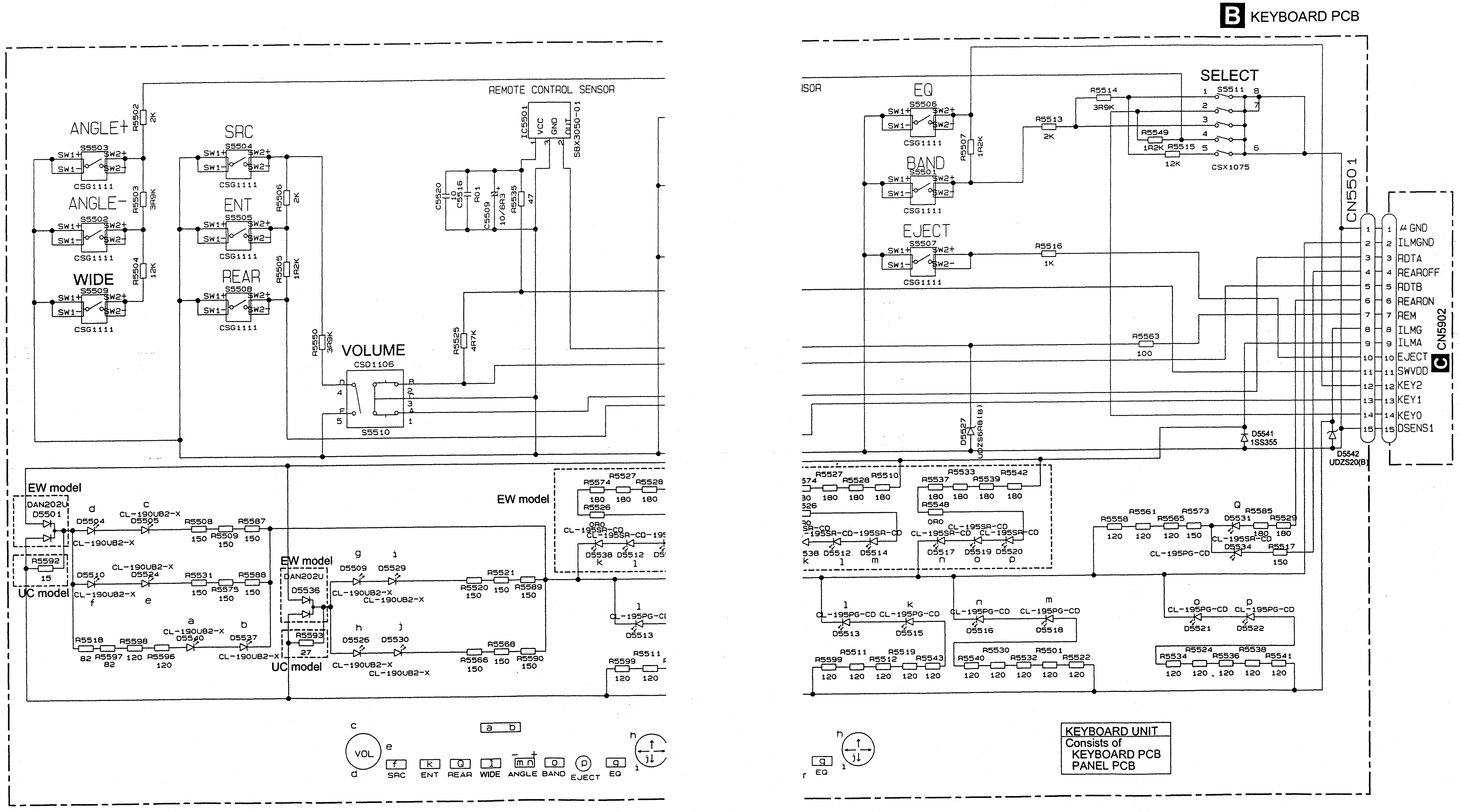
3.8 CC UNIT (MAIN, CC CORE I/F)


A 6/7 CC UNIT (MAIN, CC CORE I/F)
A 4/7
A 7/7
A 5/7
A 1/7
A 2/7
RESET
IC301 M51957BFP
IC302 TC7SH08FUS1
AND
IC309 TC7SH08FUS1
AND
DAC
IC304 AK4351VT
ADC
IC305 AK5381VT
Q301 DTC114EU
TP301
TP302
TP310
L301
L302
L305
L306
L307
L308
L312
R349 47K
R350 47K
R320 10K
R330 220
R332 4R7K
R331 220
R329 820
R358 0R0
R370 0R0
384fs
fs=44.1kHz
fs=11.025kHz
R/W
PC_XCE1
PC_XCE2
PC_XIORD
PC_XIOWR
PC_XOE
PC_XWE
PC_RESET
PC_XREG
PC_XUBUF
PC_XLBUF
PC_A0
PC_XCD1
PC_XCD2
PC_XVS1
PC_XVS2
PC_BVD1
PC_BVD2
PC_READY
PC_XWT
PC_WP
PC_XPWR
SD3VC
CCD3C
CCD25C
CCD5C
BUP3C
RST3
GNDD
GNDA
GNDV
DSP_HRDY
DSP_XHINT
DAC_MCLK
DAC_BCLK
DAC_LRCK
DAC_DATA
ADC_MCLK
ADC_BCLK
ADC_LRCK
ADC_DATA
ADC_GCNT0
ADC_GCNT1
ADC_GCNT2
AOUTRED
AOUTGREEN
AOUTBLUE
OUTCSYNC
FSC
OVER
DACOUTL
ONSEIMIC
XRSTMS3
XMS3RS
CCON
SYSRST
CTOSYS
SYSTOC
CTOM
MTOC
ATA_DIR
CPUWDT
IRQPWR
REM_IN
CTOGPS
GPSTOC
XCCSTBY
PIO0
STAST1
STAST2
TCHSEL
SFSCHK
MONION
GUIDEON
ANTON
CDSW
PBSNS
ILM
TELSEL
TIMEOUT
ONSEIMUTE
EMPHIN
6_XCTS
6_XRTS
6_XDSR
NOISE_TEL
VIDEOSW
H_RED
H_GREEN
IMODEON
MICSNS
HYOKA
DASP
CD_BCLK
CD_LRCK
CD_DATA
CTOB
BTOC
CTOETC
ETCTOC
CTOEX
EXTOC
BD0–BD15
BA1–BA23
ASIC - MAIN_BOARD
GRAPHIC - MAIN_BOARD
SOUND - MAIN_BOARD

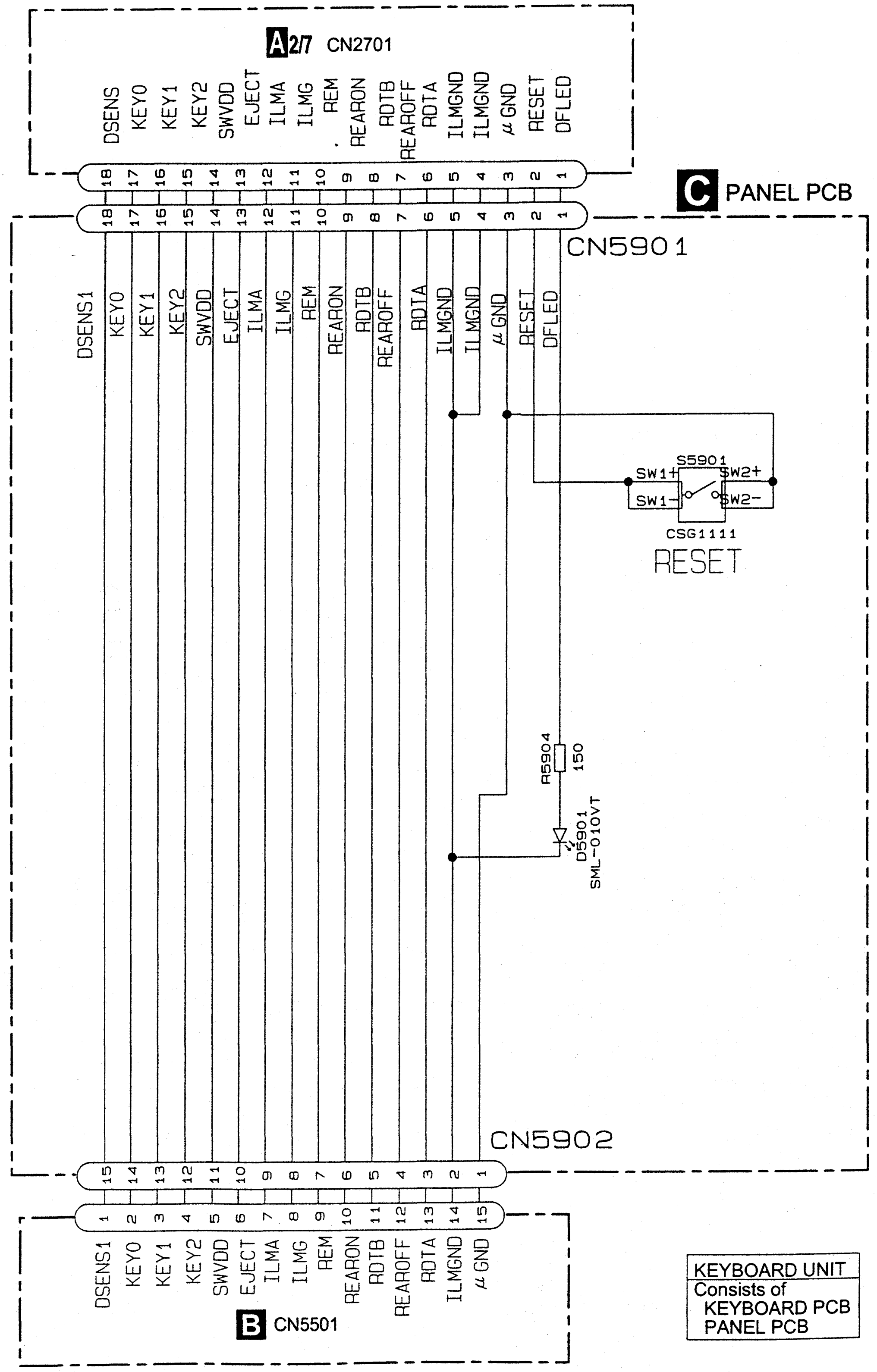
3.9 CC UNIT (ROM, SRAM, BUS-BUFFER)


A 7/7 CC UNIT (ROM, SRAM, BUS-BUFFER)
BUS-Buffer
FlashROM
SRAM
※ XCS2 : SRAM
XCS4 : GDC
XCS5 : PC-CARD
XCS6 : DSP
XCS7 : FLASH
A 4/7
A 5/7
A 6/7
A 7/7
IC101 TC74LCX08FTS1
IC102 TC7SH04FUS1
IC103 TC74LCX245FTS1
IC104 TC74LCX245FTS1
IC105 TC74LCX245FTS1
IC106 TC74LCX245FTS1
IC107 TC74LCX541FTS1
IC108 TC74LCX541FTS1
IC109 TC74LCX541FTS1
IC110
PEH003A : EW model
PEH005A : UC model
IC111
PEH004A : EW model
PEH006A : UC model
IC113
SRAMBUP3
SRAMCS
IC112 TC7SH00FUS1
IC114 TC7SH08FUS1
XCS_SRAM
SRAM_CSE
XMWR
XMRD
XLLBEN
XLUBEN
R/W
CCD3C
BUP3C
RST3
GNDD

3.10 KEYBOARD PCB


B KEYBOARD PCB
REMOTE CONTROL SENSOR
IC5501
SBX3050-01
VCC GND OUT
ANGLE+
S5503
ANGLE-
S5502
WIDE
S5509
SRC
S5504
ENT
S5505
REAR
S5508
CSG1111
SW1+ SW2+ SW1- SW2-
R5502 2K
R5503 3R9K
R5504 12K
R5506 2K
R5505 1R2K
R5550 3R9K
R5525 4R7K
C5520 10
C5516 R01
C5509 10/6R3
R5535 47
VOLUME
CSD1106
S5510
EW model
DAN202U
D5501
UC model
R5592 15
R5593 27
D5504 D5505 D5510 D5524 D5540 D5537
CL-190UB2-X
R5508 R5509 R5587 150
R5531 R5575 R5588 150
R5518 82 R5597 82 R5598 120 R5596 120
D5536
D5509 D5529 D5526 D5530
R5520 R5521 R5589 150
R5566 R5568 R5590 150
R5574 R5527 R5528 180
R5526 0R0
CL-195SR-CD
D5538 D5512 D5514
CL-195PG-CD
D5513
R5599 R5511 120
EQ
S5506
BAND
S5501
EJECT
S5507
R5507 1R2K
R5513 2K
R5516 1K
R5514 3R9K
SELECT
S5511
CSX1075
R5549 1R2K
R5515 12K
R5510 R5533 R5537 R5539 R5542 R5548 180
D5517 D5519 D5520
R5558 R5561 R5565 R5573 R5585 R5529 R5517
D5531 D5534
D5515 D5516 D5518 D5521 D5522
R5519 R5543 R5512 R5540 R5530 R5532 R5501 R5522
R5534 R5524 R5536 R5538 R5541 120
R5563 100
D5527 UDZS6R8(B)
D5541 1SS355
D5542 UDZS20(B)
CN5501
C CN5902
1 μGND
2 ILMGND
3 RDTA
4 REAROFF
5 RDTB
6 REARON
7 REM
8 ILMG
9 ILMA
10 EJECT
11 SWVDD
12 KEY2
13 KEY1
14 KEY0
15 DSENS1
a b c d e f g h i j k l m n o p q r
VOL
SRC ENT REAR WIDE ANGLE BAND EJECT EQ
KEYBOARD UNIT
Consists of
KEYBOARD PCB
PANEL PCB

3.11 PANEL PCB

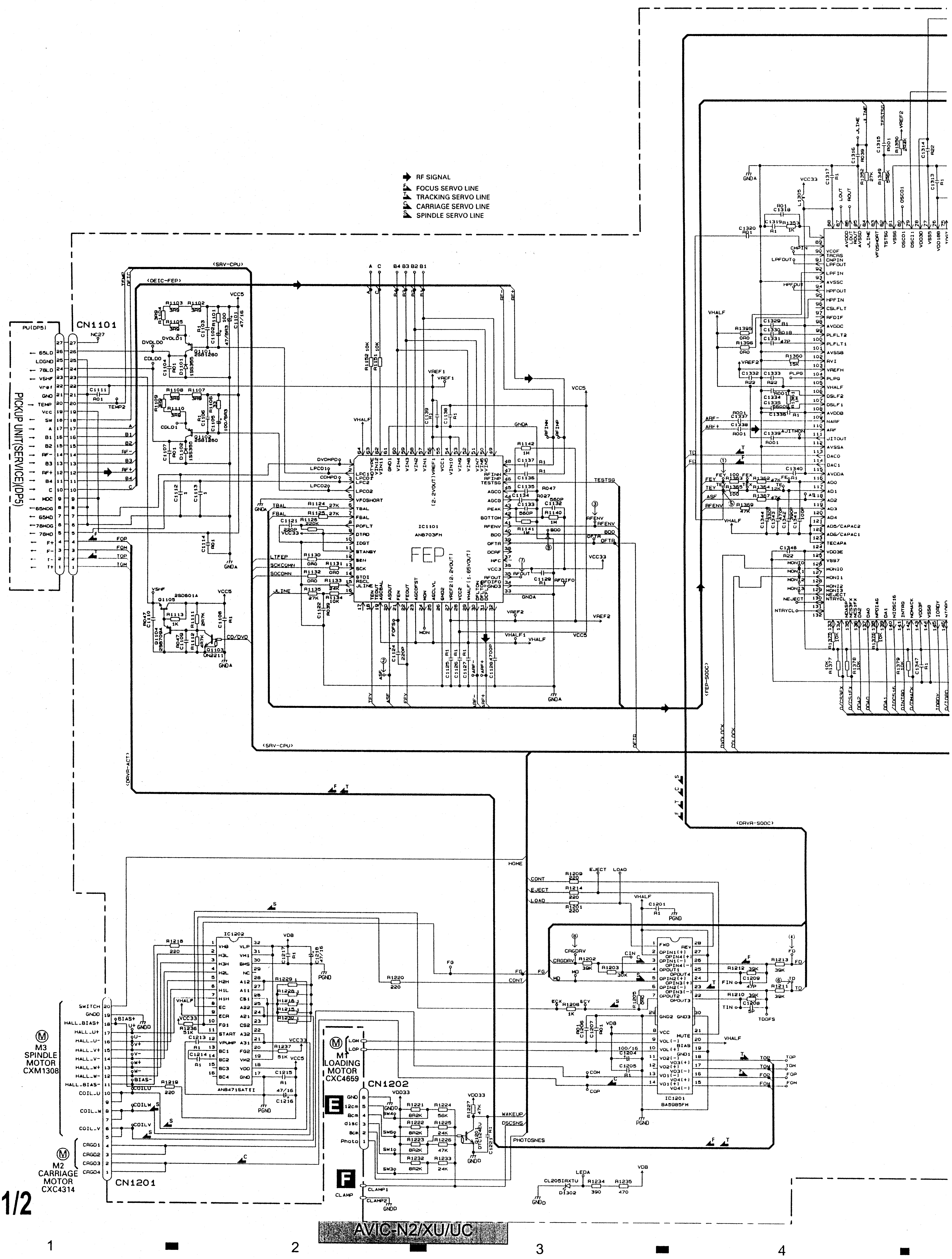


A 2/7 CN2701
DSENS
KEY0
KEY1
KEY2
SWVDD
EJECT
ILMA
ILMG
REM
REARON
RDTB
REAROFF
RDTA
ILMGND
ILMGND
μ GND
RESET
DFLED
18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
C PANEL PCB
CN5901
DSENS1
KEY0
KEY1
KEY2
SWVDD
EJECT
ILMA
ILMG
REM
REARON
RDTB
REAROFF
RDTA
ILMGND
ILMGND
μ GND
RESET
DFLED
S5901
SW1+
SW1-
SW2+
SW2-
CSG1111
RESET
R5904
150
D5901
SML-010VT
CN5902
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
DSENS1
KEY0
KEY1
KEY2
SWVDD
EJECT
ILMA
ILMG
REM
REARON
RDTB
REAROFF
RDTA
ILMGND
μ GND
B CN5501
KEYBOARD UNIT
Consists of
KEYBOARD PCB
PANEL PCB

C

3.12 DVD CORE UNIT(MS3)(SODC)(GUIDE PAGE)

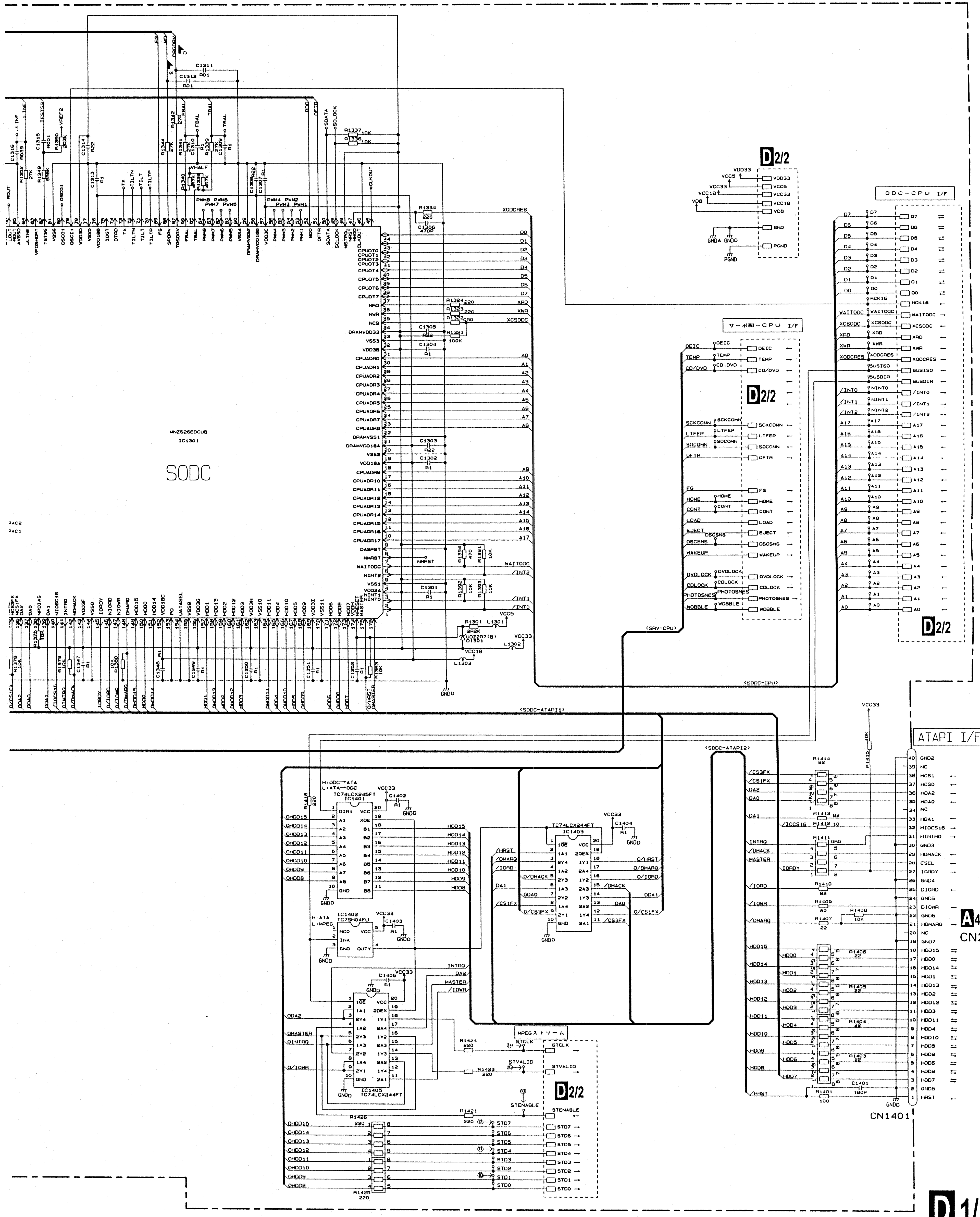
D-a 1/2


RF SIGNAL
FOCUS SERVO LINE
TRACKING SERVO LINE
CARRIAGE SERVO LINE
SPINDLE SERVO LINE
PU(DP5)
CN1101
PICKUP UNIT(SERVICE)(DP5)
(SRV-CPU)
(DEIC-FEP)
IC1101
AN8703FH
FEP
(FEP-SODC)
(DRVA-SODC)
(DRVA-ACT)
TESTSG
VHALF
VCC5
VCC33
VREF1
VREF2
GNDA
HOME
CONT
EJECT
LOAD
IC1202
AN8471SATII
IC1201
BA5985FM
M3
SPINDLE
MOTOR
CXM1308
M1
LOADING
MOTOR
CXC4659
M2
CARRIAGE
MOTOR
CXC4314
CN1201
CN1202
E
F
CLAMP
CLAMP1
CLAMP2
WAKEUP
DSCSNS
PHOTOSNES
D1302
CL205IRXTU
LEDA
VDD

D 1/2

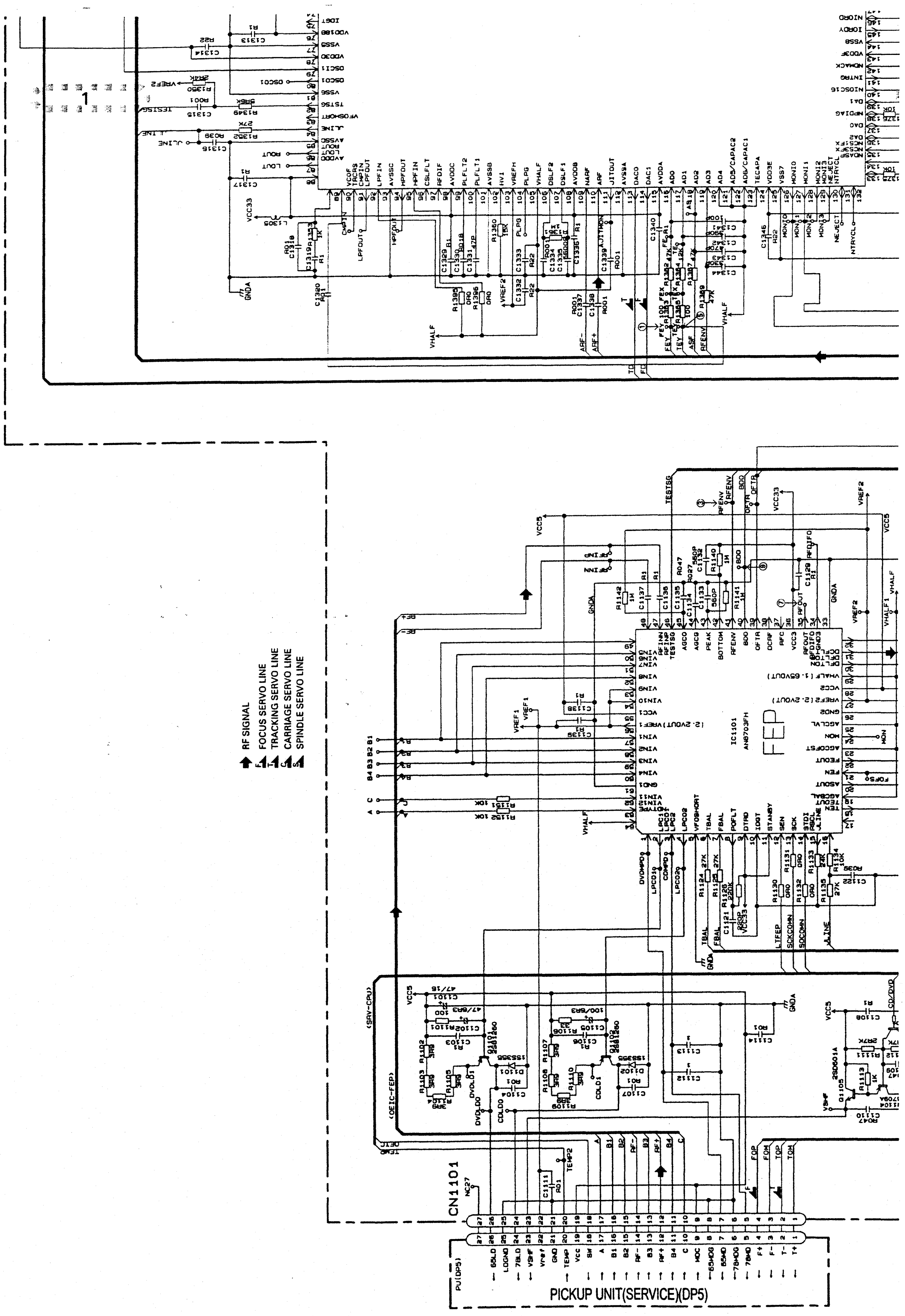
D-b 1/2

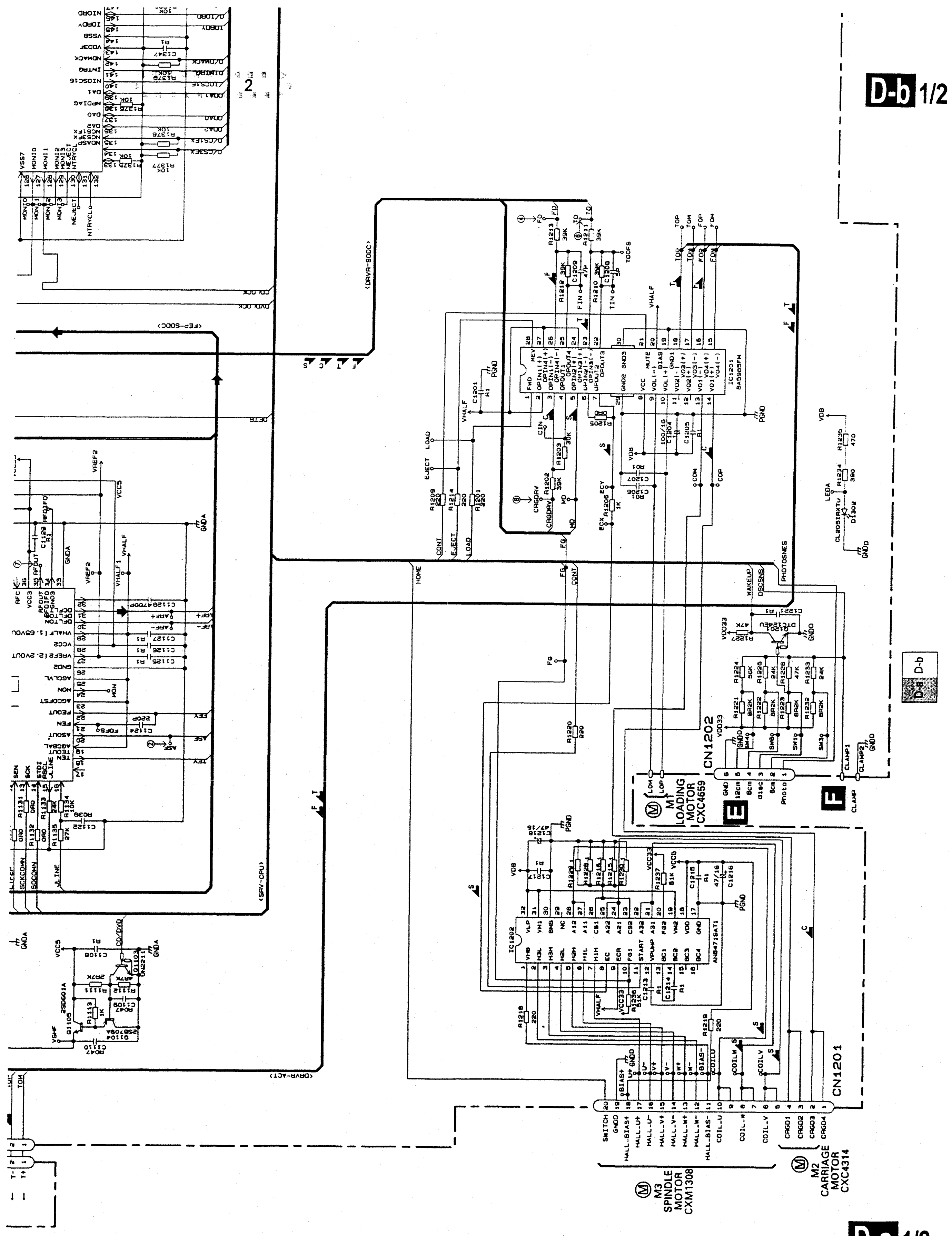
D 1/2 DVD CORE UNIT(MS3)(SODC)


IC1301
SODC
IC1401
TC74LCX245FT
H:ODC→ATA
L:ATA→ODC
IC1402
TC7SH04FU
H:ATA
L:MPEG
IC1403
TC74LCX244FT
IC1405
TC74LCX244FT
D 2/2
ODC-CPU I/F
サーボ部-CPU I/F
MPEGストリーム
ATAPI I/F
A 4/7
CN2
CN1401
<SRV-CPU>
<SODC-CPU>
<SODC-ATAPI1>
<SODC-ATAPI2>
VCC33
VCC18
VCC5
VDD33
GNDD
PGND
GNDA
XODCRES
WAITODC
XCSODC
XRD
XWR
STCLK
STVALID
STENABLE
STD0
STD1
STD2
STD3
STD4
STD5
STD6
STD7

D 1/2

D-b 1/2


RF SIGNAL
FOCUS SERVO LINE
TRACKING SERVO LINE
CARRIAGE SERVO LINE
SPINDLE SERVO LINE
IC1101
AN8703FH
FEP
CN1101
PICKUP UNIT(SERVICE)(DP5)
PU(DP5)
(SRV-CPU)
(FEP-SODC)
D-b
D-a

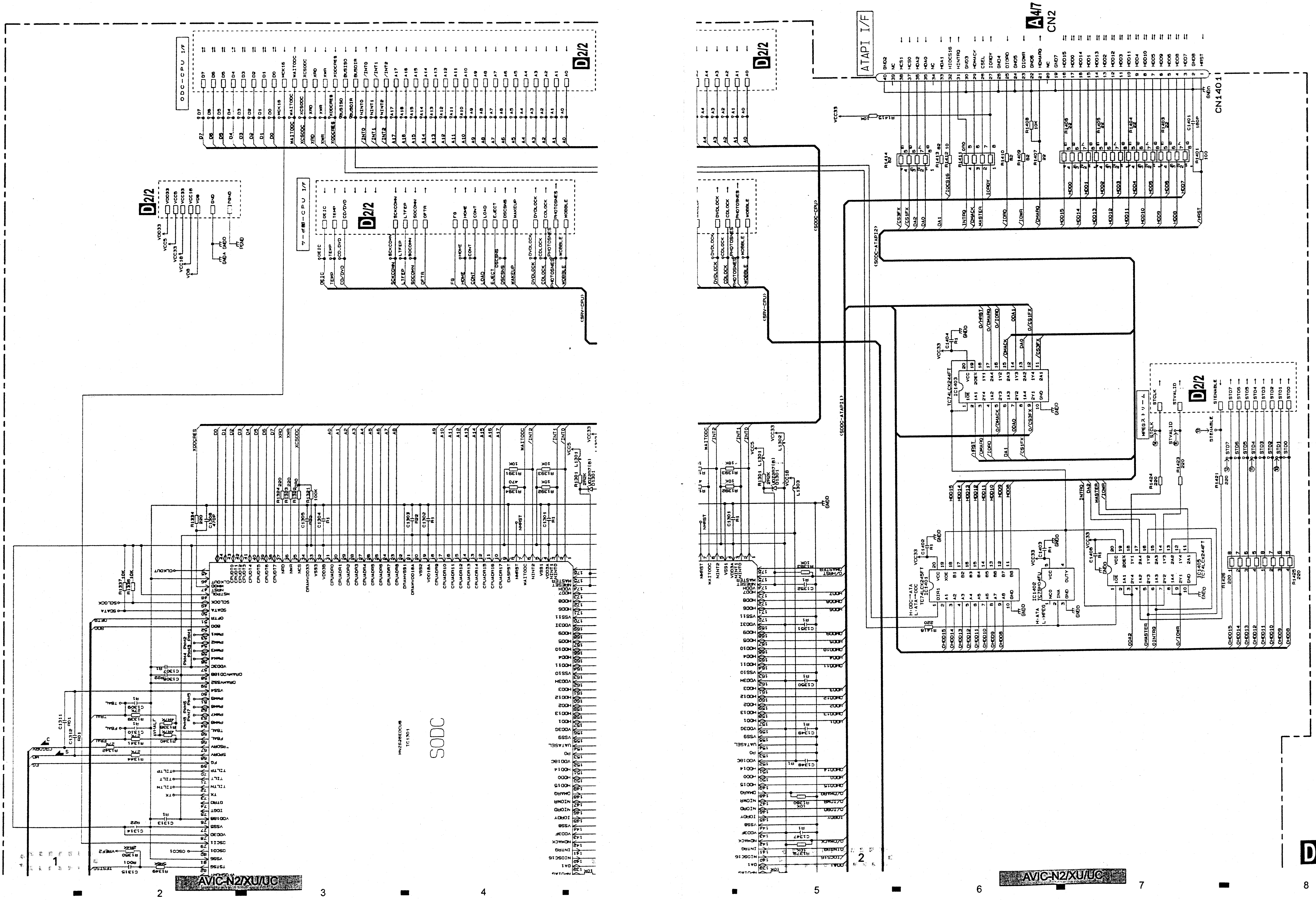

IC1201
BA5985FM
IC1202
AN8471SA1
CN1202
CN1201
M1
LOADING
MOTOR
CXC4659
E
F
M3
SPINDLE
MOTOR
CXM1308
M2
CARRIAGE
MOTOR
CXC4314
(DRVR-SODC)
(DRVR-ACT)
(SRV-CPU)
D-b

D-b 1/2

D-a 1/2

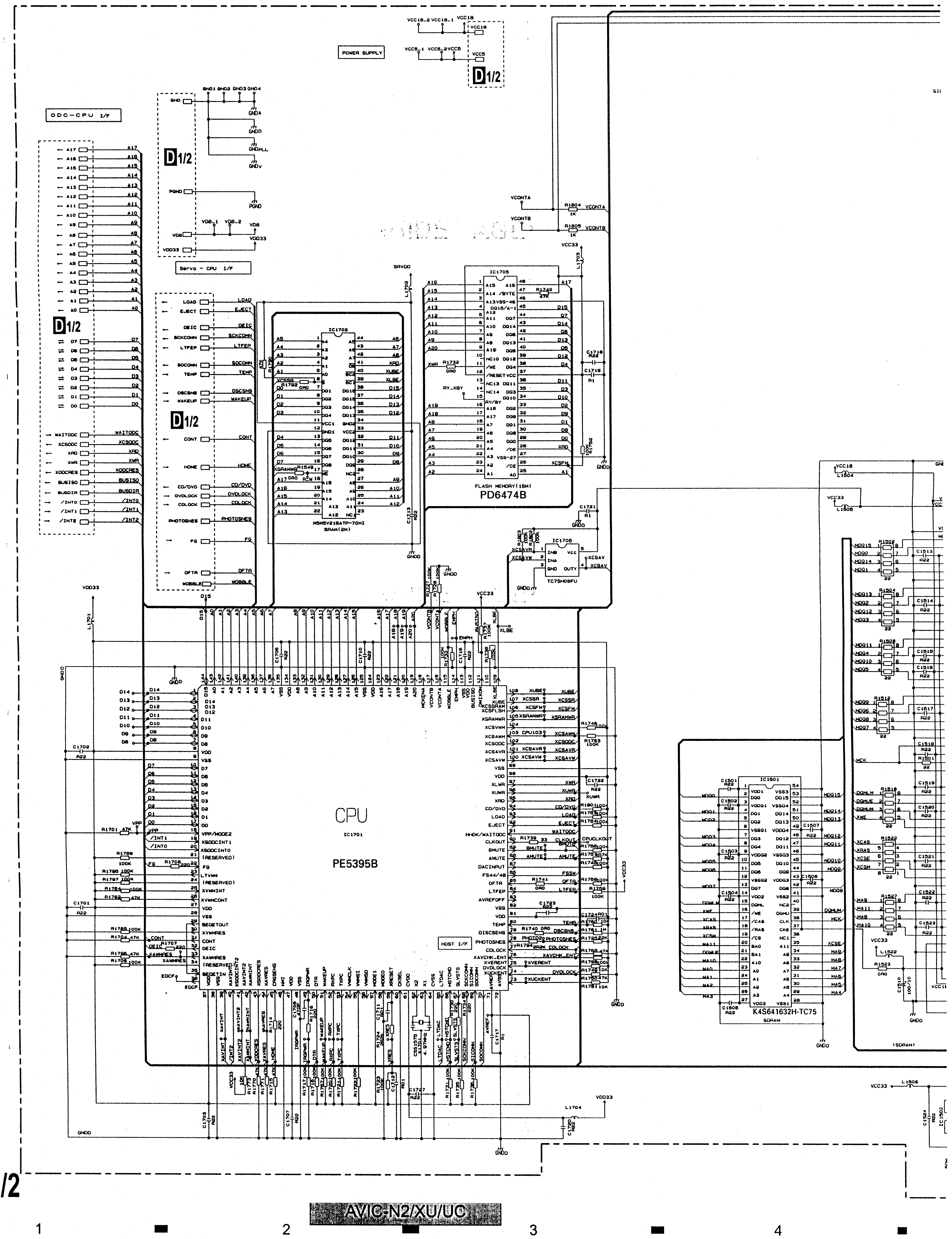
D-a 1/2

D 1/2 DVD CORE UNIT(MS3)(SODC)


ODC-CPU I/F
D 2/2
サーボ-CPU I/F
SODC
IC1301
ATAPI I/F
A 4/7
CN2
CN1401
IC1401
TC74LCX245FT
IC1402
IC1403
TC74LCX244FT
IC1404
TC74LCX244FT
MPEG2 I/F
(SODC-CPU)
(SRV-CPU)
(SODC-ATAPI1)
(SODC-ATAPI2)
D-a
D-b

3.13 DVD CORE UNIT(MS3)(CPU)(GUIDE PAGE)

D-a 2/2

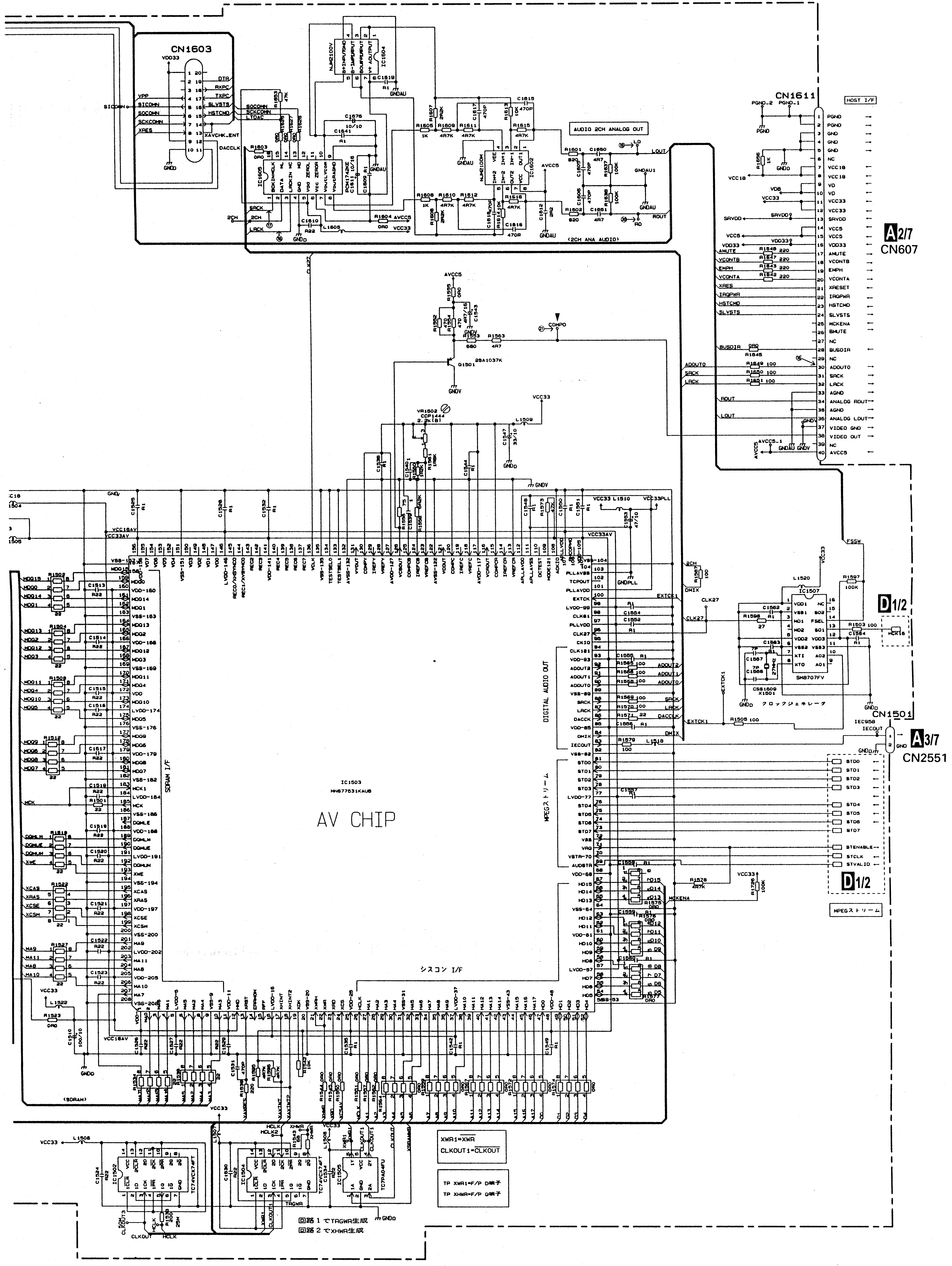

POWER SUPPLY
ODC-CPU I/F
Servo - CPU I/F
D1/2
IC1702
M5M5V216ATP-70HI
SRAM(2M)
IC1705
FLASH MEMORY(16M)
PD6474B
IC1706
TC7SH08FU
CPU
IC1701
PE5395B
HOST I/F
IC1501
K4S641632H-TC75
SDRAM
<SDRAM>

D 2/2

A

D-b 2/2

D 2/2 DVD CORE UNIT(MS3)(CPU)


CN1603
VDD33
VPP
SICOMIN
SICOMOUT
SCKCOMIN
XRES
DTR
RXPC
TXPC
SLVSTS
HSTCHD
XAVCHK_ENT
DACCLK
IC1605
IC1604
NJM2100V
PCM1742KE
NJM2100M
IC1602
AUDIO 2CH ANALOG OUT
(2CH ANA AUDIO)
LOUT
ROUT
CN1611
HOST I/F
PGND
GND
NC
VCC18
VD
VCC33
SRVDD
VCC5
VDD33
AMUTE
VCONTB
EMPH
VCONTA
XRESET
IRQPWR
HSTCHD
SLVSTS
MCKENA
BMUTE
BUSDIR
ADOUT0
SRCK
LRCK
AGND
ANALOG ROUT
ANALOG LOUT
VIDEO GND
VIDEO OUT
AVCC5
A 2/7
CN607
AVCC5
COMPO
Q1501
2SA1037K
VR1502
CCP1444
VCC33
GNDV
VCC18AV
VCC33AV
VCC33PLL
L1510
IC1503
MN677531KAUB
AV CHIP
SDRAM I/F
DIGITAL AUDIO OUT
MPEGストリーム
シスコン I/F
IC1507
SM8707FV
クロックジェネレータ
X1501
D 1/2
MCK18
CN1501
IEC958
IECOUT
A 3/7
CN2551
STD0
STD1
STD2
STD3
STD4
STD5
STD6
STD7
STENABLE
STCLK
STVALID
D 1/2
MPEGストリーム
(SDRAM)
IC1502
TC74VCX74FT
IC1504
TC74VCX74FT
IC1505
TC7PA04FU
XWR1=XWR
CLKOUT1=CLKOUT
TP XWR1=F/P D端子
TP XHWR=F/P D端子
回路1でTAGWR生成
回路2でXHWR生成
HCLK
CLKOUT

B

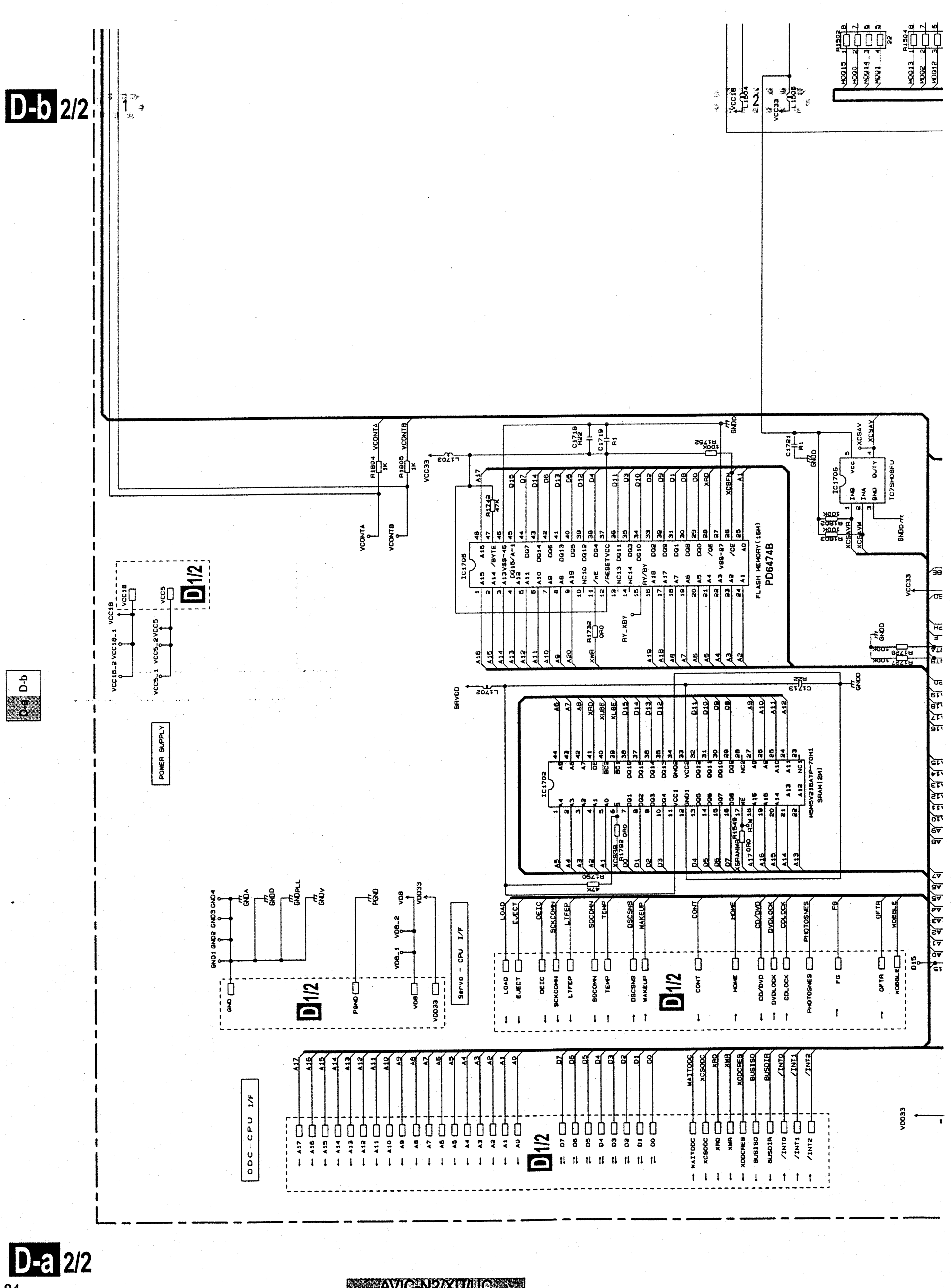
C

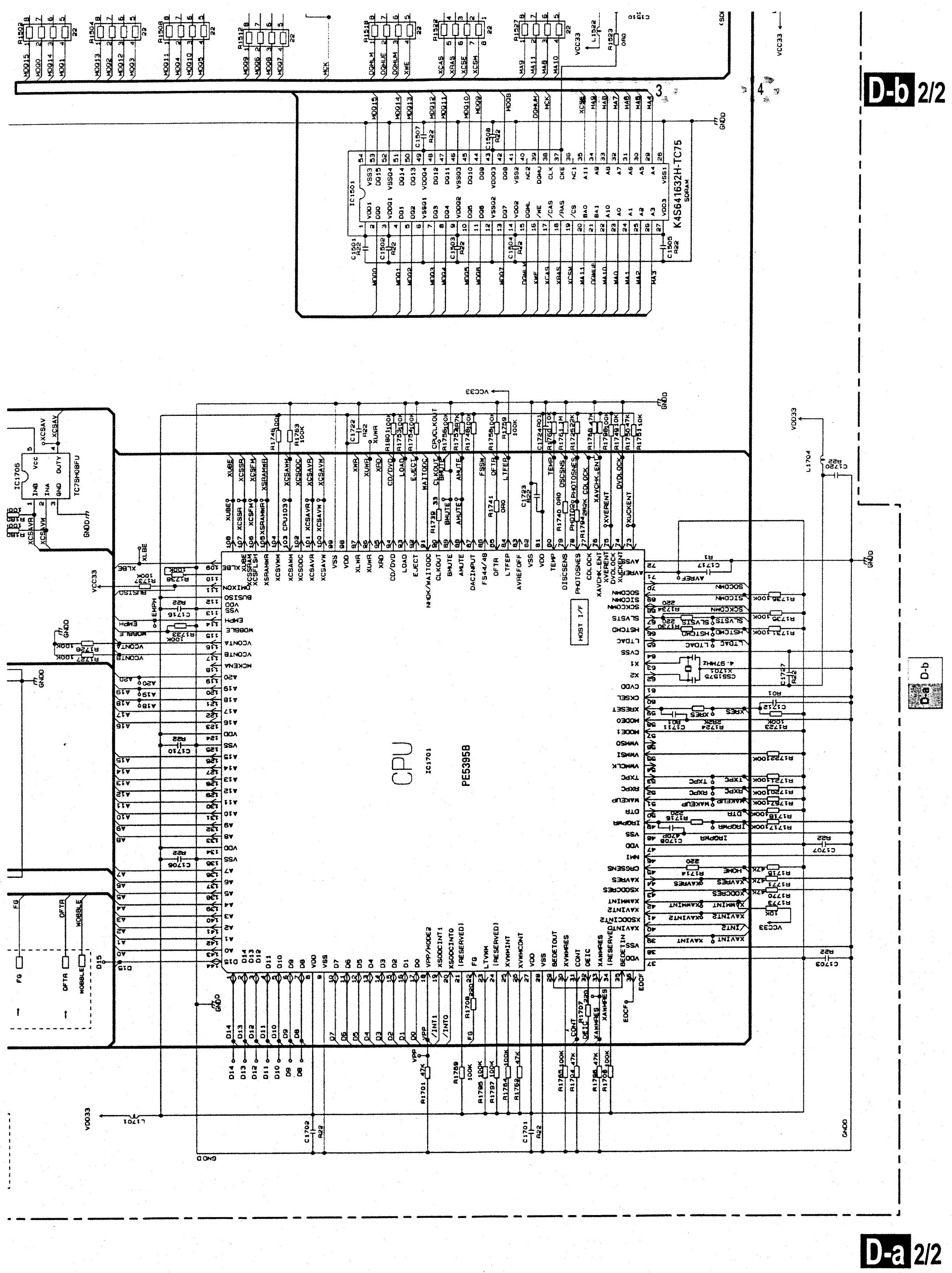
D

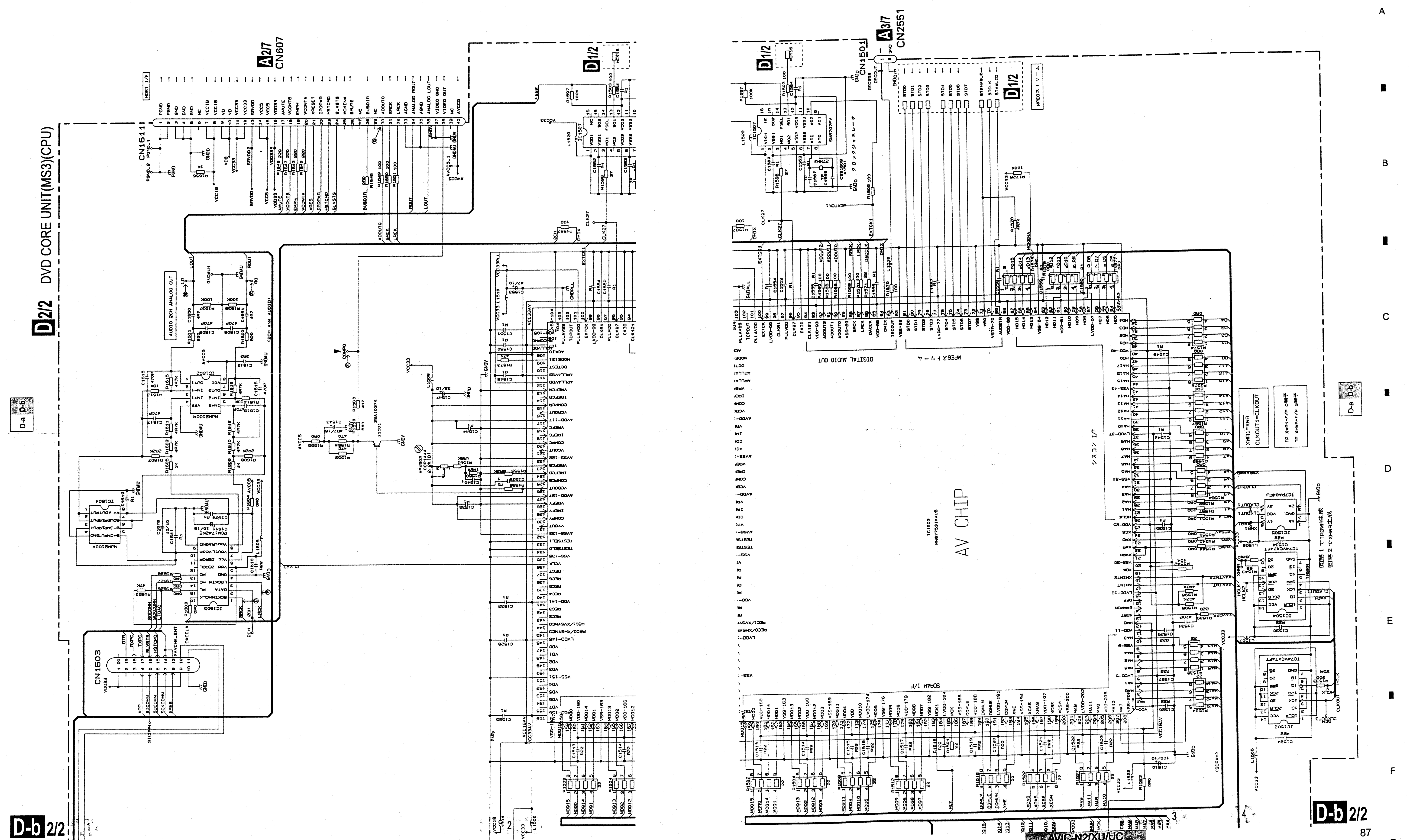
E

F

D 2/2


D-b 2/2
D-a 2/2
D 1/2
D-b
D-a
POWER SUPPLY
Servo - CPU I/F
ODC-CPU I/F
IC1705
FLASH MEMORY(16M)
PD6474B
IC1702
M5M5V216ATP-70HI
SRAM(2M)
IC1706
TC7SH08FU
VCC33
SRVDD
VDD33
GNDD
LOAD
EJECT
DEIC
SCKCOMN
LTFEP
SOCOMN
TEMP
DSCSNS
WAKEUP
CONT
HOME
CD/DVD
DVDLOCK
CDLOCK
PHOTOSNES
FG
OFTR
WOBBLE
WAITODC
XCSODC
XRD
XWR
XODCRES
BUSISO
BUSDIR
/INT0
/INT1
/INT2

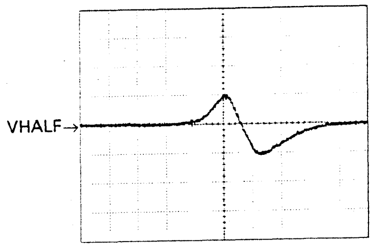

D-b 2/2
D-a 2/2
D-b
IC1501
K4S641632H-TC75
SDRAM
IC1701
CPU
PE5395B
HOST I/F
IC1705
TC7SH08FU
VCC33
VDD33
GNDD
CSB1575
4.97MHz
X1701


D 2/2 DVD CORE UNIT(MS3)(CPU)
A 2/7 CN607
CN1611
D 1/2
IC1507
IC1602
NJM2100M
IC1604
IC1605
CN1603
AUDIO 2CH ANALOG OUT
AV CHIP
IC1503
CN1501
A 3/7 CN2551
IC1504
IC1505
IC1502
DIGITAL AUDIO OUT
SDRAM I/F
D-a
D-b
D-b 2/2

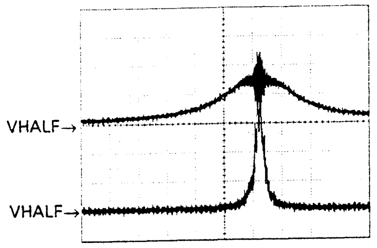
Waveforms

Note:1. The encircled number denote measuring pointes in the circuit diagram.
2. Reference voltage VHALF : 1.65V

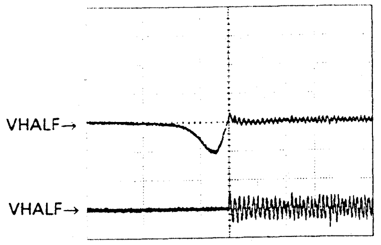
① FEY 500mV/div. 1ms/div.
Focus search



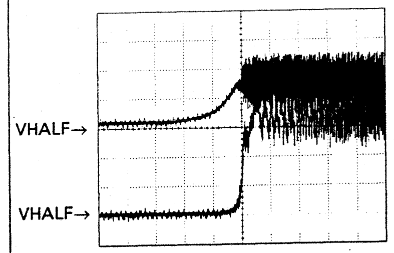
② CH1: ASF 200ms/div. 1ms/div.
③ CH2: RFENV
Focus search



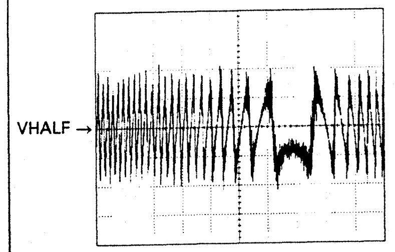
① CH1: FEY 500mV/div. 1ms/div.
④ CH2: FD 1V/div. 1ms/div.
Focus close



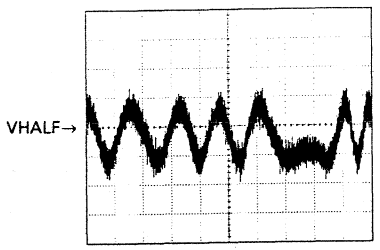
② CH1: ASF 200mV/div. 2ms/div.
③ CH1: RFENV
Focus close



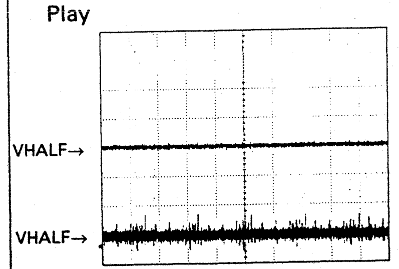
⑤ CH1: TEY 500mV/div. 1ms/div.
Focus close(DVD)



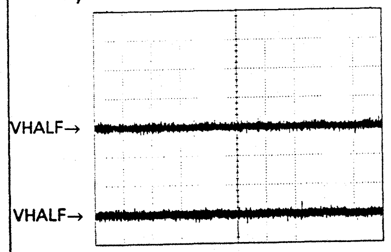
⑤ CH1: TEY 500mV/div. 1ms/div.
Focus close(CD)



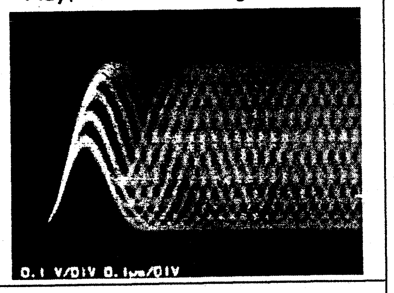
① CH1: FEY 500mV/div.20ms/div.
④ CH2: FD
Play



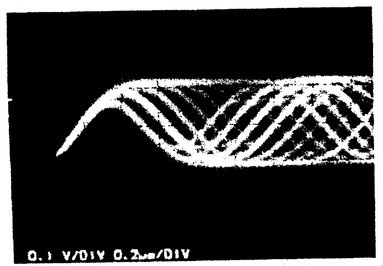
⑤ CH1: TEY 500mV/div.20ms/div.
⑥ CH2: TD
Play



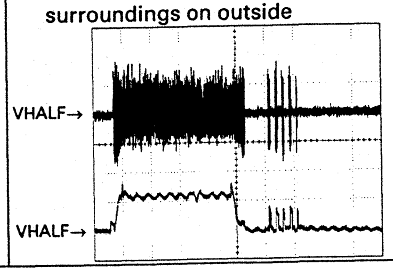
⑦ CH1: RFOUT 0.1V/div. 0.1µs/div.
Play(DVD surroundings on inside)



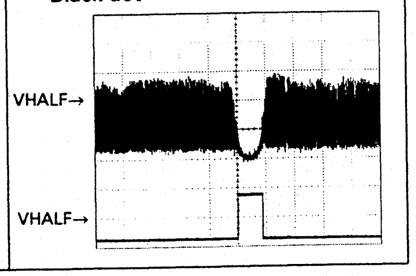
⑦ CH1: RFOUT 0.1V/div. 0.2µs/div.
Play(CD)



⑤ CH1: TEY 500mV/div. 100ms/div.
⑧ CH2: CRGDRV
Surroundings on inside->
surroundings on outside



⑦ CH1: RFOUT200mV/div. 100µs/div.
⑨ CH2: BDO 2V/div. 100µs/div.
Black dot



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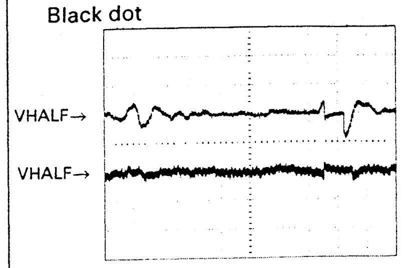
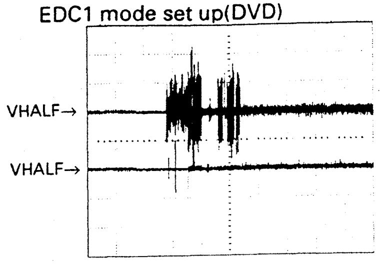
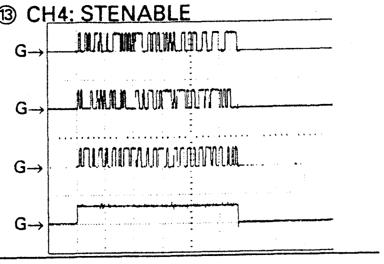
④ CH1: FD 1V/div. 100µs/div.
⑥ CH2: TD 500mV/div. 100µs/div.
Black dot



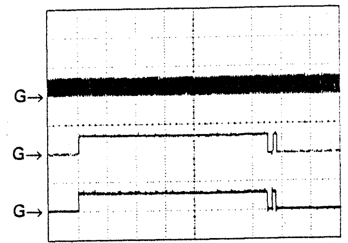
⑤ CH1: TEY 500mV/div.1s/div.
① CH2: FEY
EDC1 mode set up(DVD)



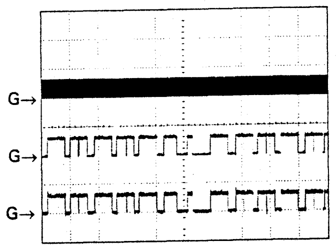
⑩ CH1: STD1
⑪ CH2: STD4 5V/div. 2µs/div.
⑫ CH3: STD7
⑬ CH4: STENABLE



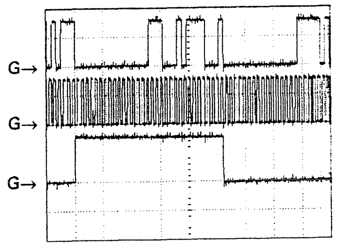
⑭ CH1: STCLK
⑮ CH2: STVALID 5V/div. 2µs/div.
⑬ CH3: STENABLE



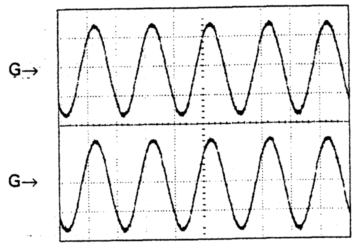
⑭ CH1: STCLK
⑮ CH2: STVALID 5V/div. 50µs/div.
⑬ CH3: STENABLE



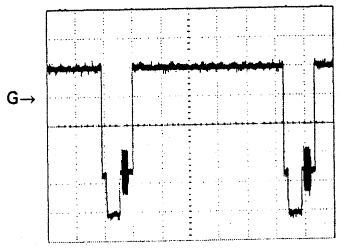
⑯ CH1: ADOUT0
⑰ CH2: SRCK 2V/div. 2µs/div.
⑱ CH3: LRCK



⑲ CH1: LO 1V/div. 500µs/div.
⑳ CH2: RO

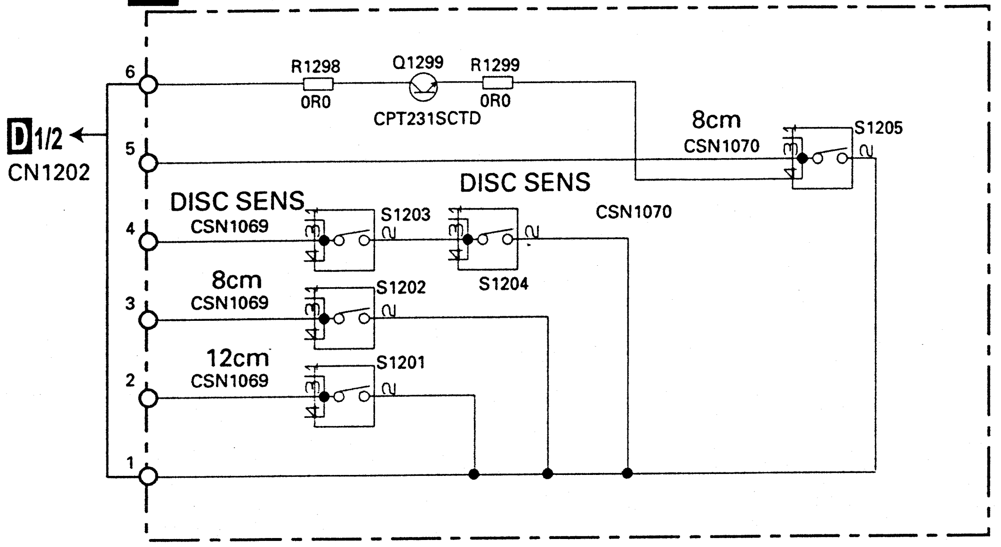


㉑ CH1: COMPO 200mV/div. 10µs/div.
[White 100% output]

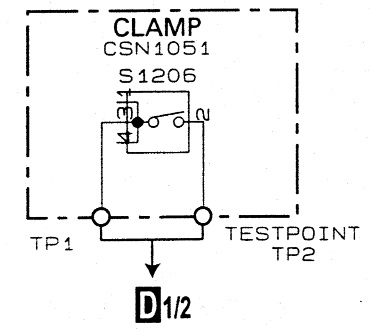


3.14 COMPOUND UNIT(A) AND COMPOUND UNIT(B)

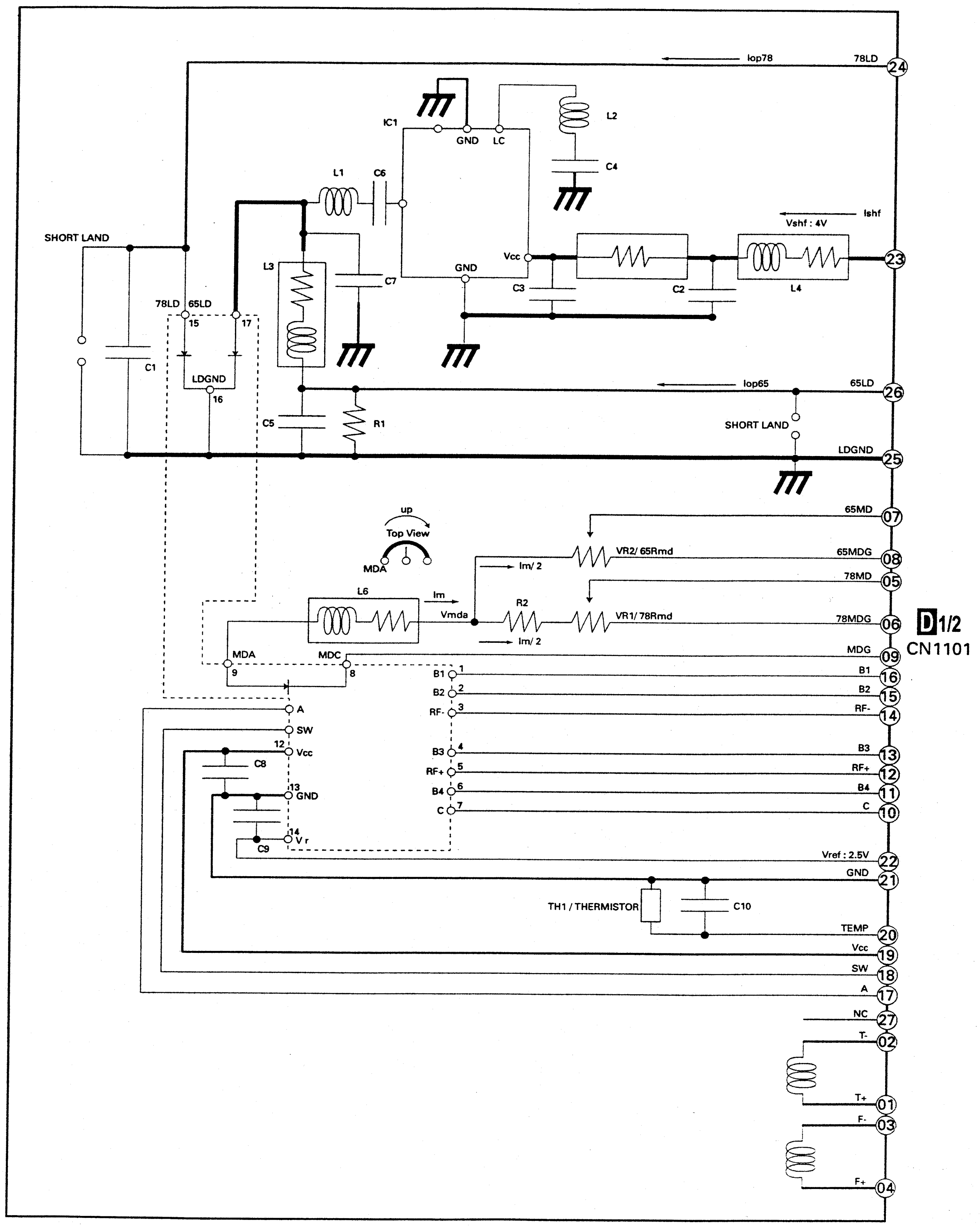
E COMPOUND UNIT(A)


D1/2
CN1202
6
5
4
3
2
1
R1298
0R0
Q1299
CPT231SCTD
R1299
0R0
8cm
CSN1070
S1205
DISC SENS
CSN1069
S1203
DISC SENS
CSN1070
S1204
8cm
CSN1069
S1202
12cm
CSN1069
S1201

F COMPOUND UNIT(B)

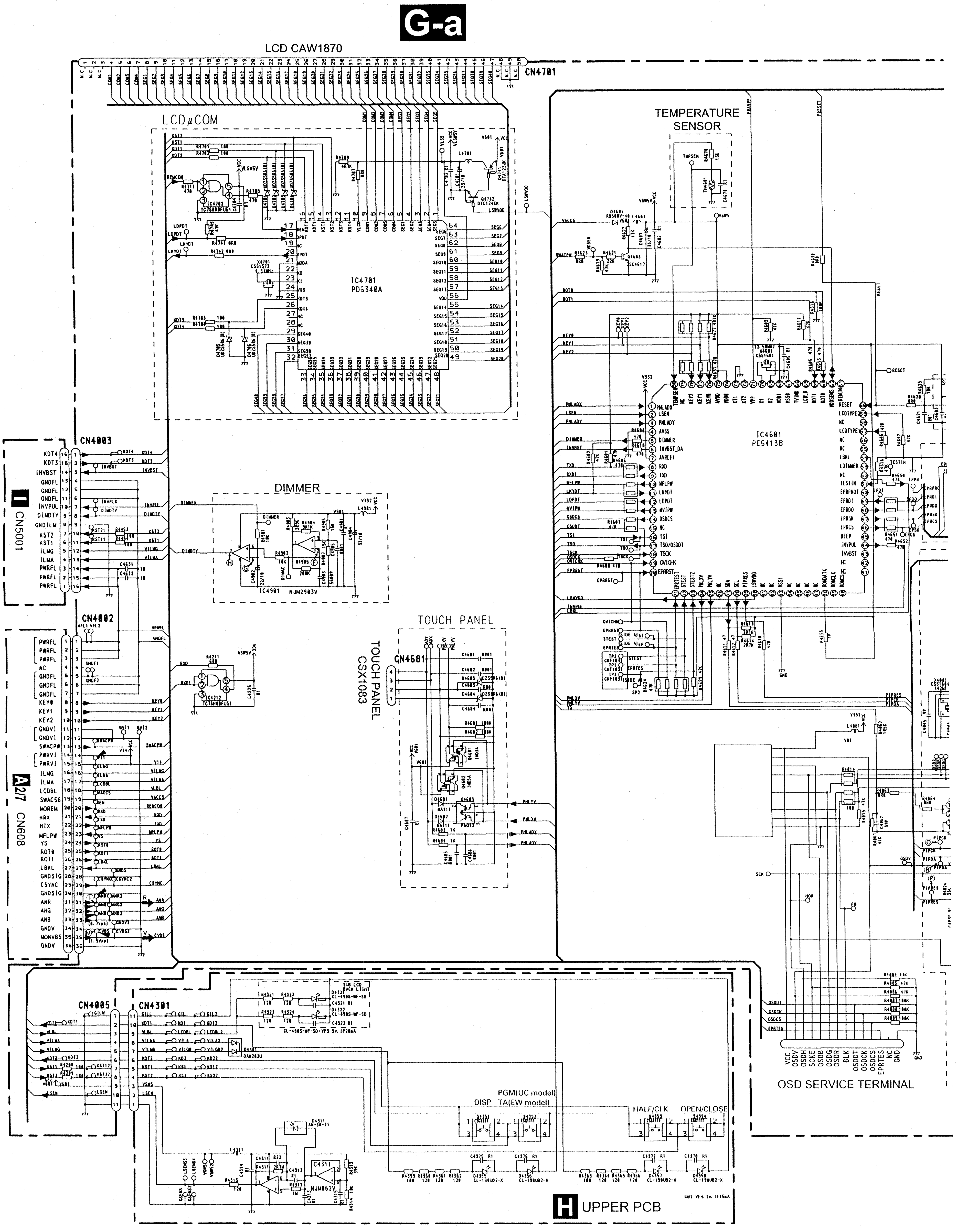

CLAMP
CSN1051
S1206
TP1
TESTPOINT
TP2
D1/2

3.15 PU UNIT(REFERENCE)


Iop78
78LD
24
IC1
GND
LC
L2
C4
L1
C6
Ishf
Vshf : 4V
SHORT LAND
Vcc
23
L3
C7
GND
C3
C2
L4
78LD
65LD
15
17
C1
LDGND
16
Iop65
65LD
26
C5
R1
SHORT LAND
LDGND
25
up
Top View
MDA
65MD
07
VR2/ 65Rmd
65MDG
08
Im/ 2
78MD
05
L6
Im
Vmda
R2
VR1/ 78Rmd
78MDG
06
Im/ 2
D1/2
CN1101
MDA
9
MDC
8
MDG
09
B1
1
B1
16
B2
2
B2
15
RF-
3
RF-
14
A
SW
12
Vcc
C8
B3
4
B3
13
RF+
5
RF+
12
B4
6
B4
11
13
GND
C
7
C
10
14
Vr
C9
Vref : 2.5V
22
GND
21
TH1 / THERMISTOR
C10
TEMP
20
Vcc
19
SW
18
A
17
NC
27
T-
02
T+
01
F-
03
F+
04

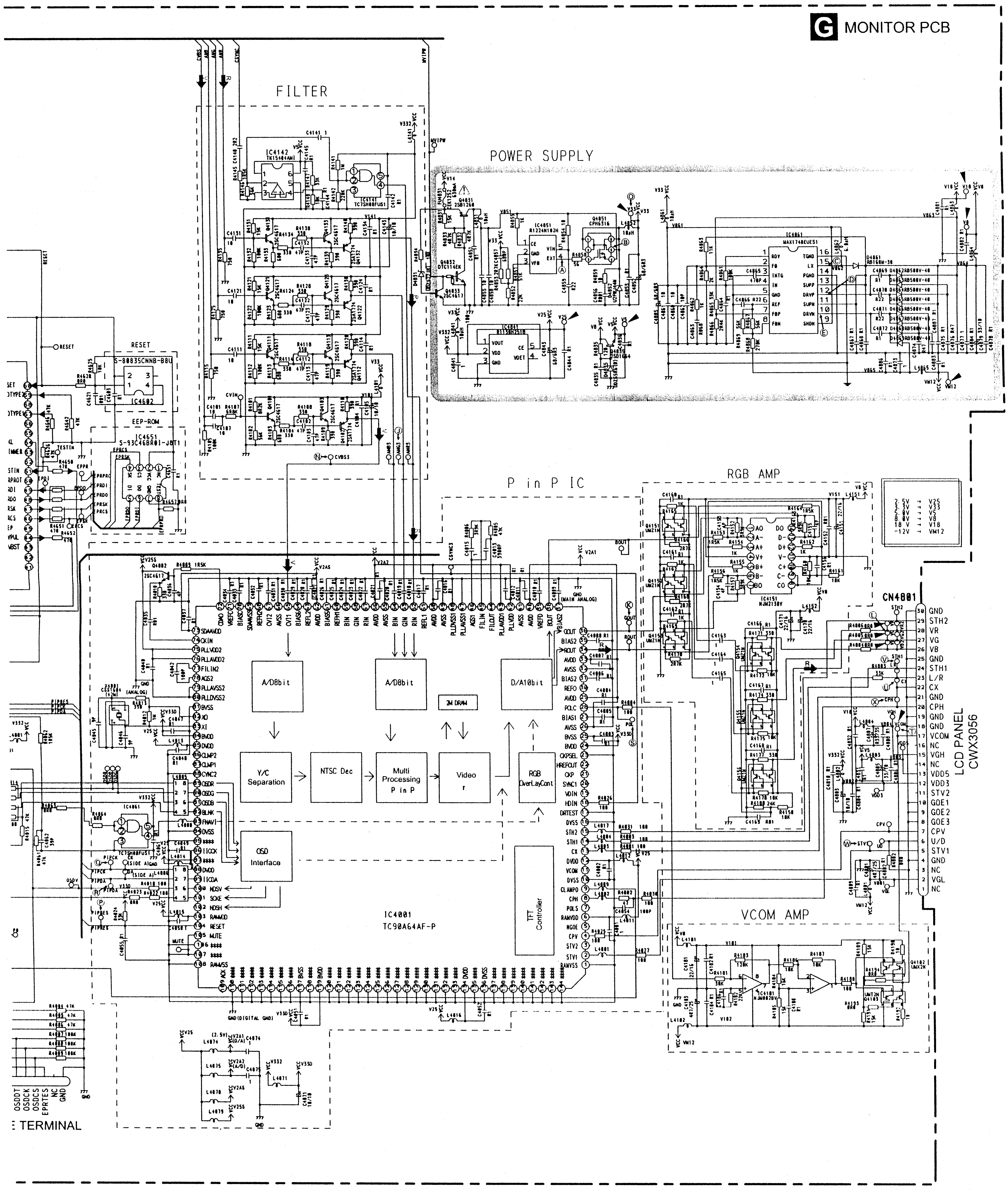
E F

3.16 MONITOR PCB AND UPPER PCB(GUIDE PAGE)


G-a
LCD CAW1870
CN4701
LCDμCOM
IC4701
PD6340A
TEMPERATURE
SENSOR
IC4601
PE5413B
CN4003
I CN5001
DIMMER
IC4901 NJM2903V
CN4002
A 2/7 CN608
TOUCH PANEL
CN4601
TOUCH PANEL
CSX1083
CN4005
CN4301
PGM(UC model)
DISP TA(EW model)
HALF/CLK
OPEN/CLOSE
OSD SERVICE TERMINAL
VCC
OSDV
OSDH
SCKE
OSDB
OSDG
OSDR
BLK
OSDDT
OSDCK
OSDCS
EPRTES
NC
GND
H UPPER PCB

G **H**

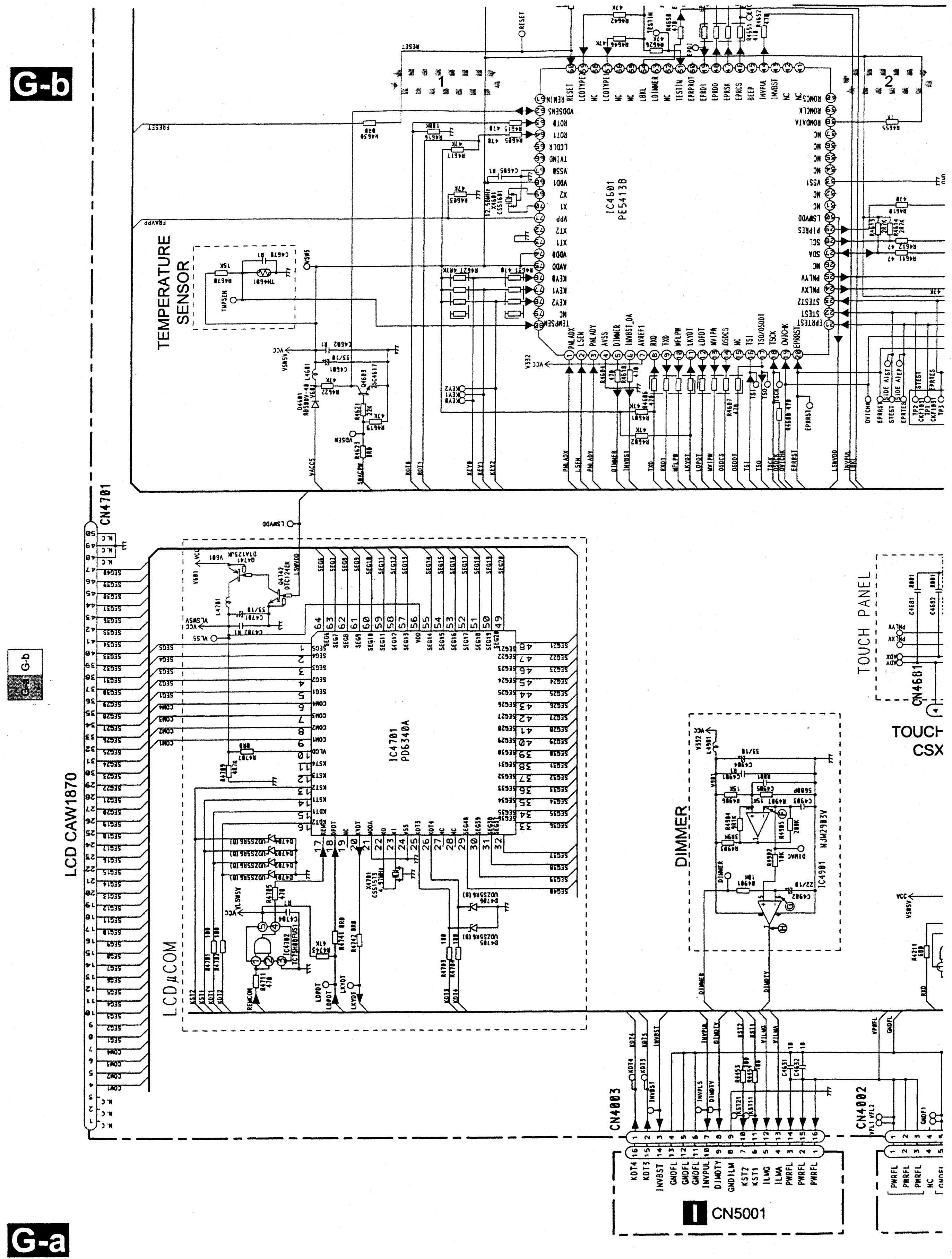
G-b

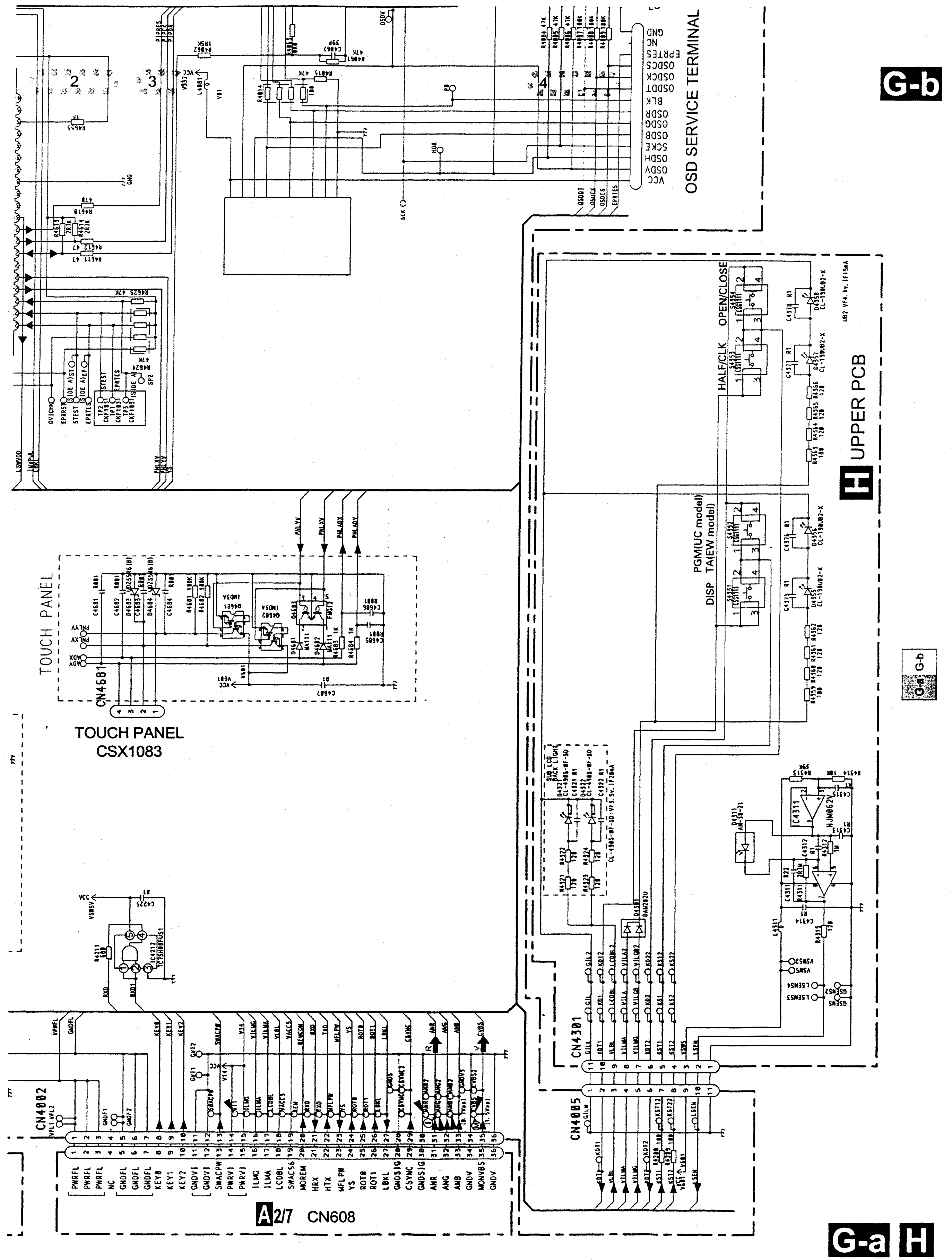

G MONITOR PCB
FILTER
IC4142
TK15404AM1
POWER SUPPLY
IC4851
R1224N102H
IC4861
MAX1748EUE
RESET
S-80835CNNB-B8U
IC4602
EEP-ROM
IC4651
S-93C46BR01-J8T1
P in P IC
RGB AMP
IC4151
NJM2158V
2.5V → V25
3.3V → V33
5V → V5
8V → V8
18V → V18
-12V → VM12
CN4801
LCD PANEL
CWX3056
30 GND
29 STH2
28 VR
27 VG
26 VB
25 GND
24 STH1
23 L/R
22 CX
21 GND
20 CPH
19 GND
18 GND
17 VCOM
16 NC
15 VGH
14 NC
13 VDD5
12 VDD3
11 STV2
10 GOE1
9 GOE2
8 GOE3
7 CPV
6 U/D
5 STV1
4 GND
3 NC
2 VGL
1 NC
A/D8bit
A/D8bit
2M DRAM
D/A10bit
Y/C Separation
NTSC Dec
Multi Processing P in P
Video γ
RGB OverLayCont
OSD Interface
TFT Controller
IC4001
TC90A64AF-P
IC4861
VCOM AMP
IC4181
NJM8870V
TERMINAL

V Composite Video Signal

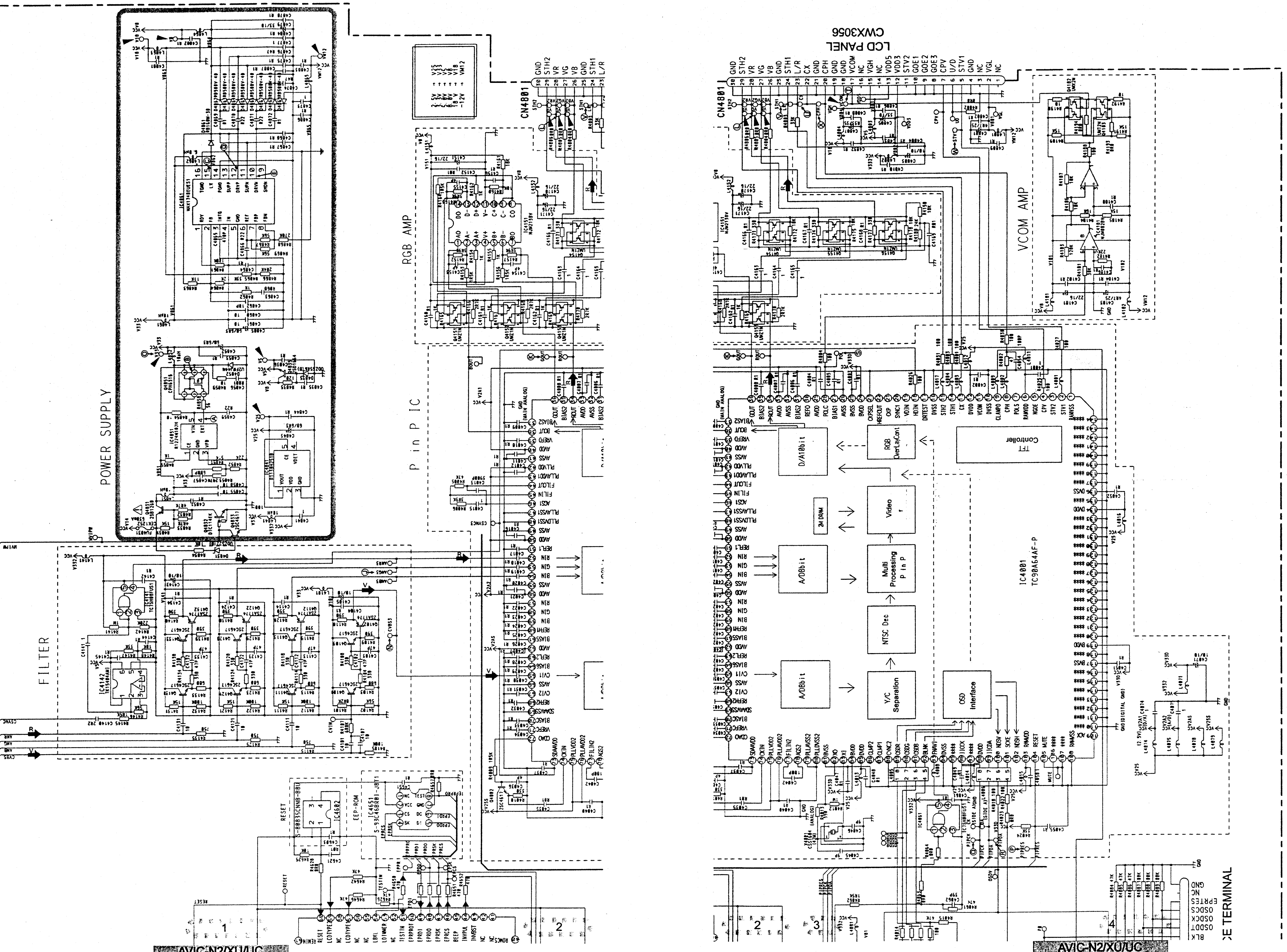
R RGB Signal

MONITOR UNIT
Consists of
MONITOR PCB
UPPER PCB
INVERTER PCB


G-b
G-a
TEMPERATURE SENSOR
IC4601
PE5413B
LCD CAW1870
CN4701
IC4701
PD6340A
LCD μCOM
DIMMER
IC4901
NJM2903V
TOUCH PANEL
CN4681
TOUCH
CSX
CN4003
CN4002
I CN5001


G-b
G-a
H
OSD SERVICE TERMINAL
TOUCH PANEL
CN4681
TOUCH PANEL
CSX1083
H UPPER PCB
HALF/CLK
OPEN/CLOSE
PGM(UC model)
DISP TA(EW model)
CN4301
CN4005
CN4002
A 2/7 CN608

G MONITOR PCB


POWER SUPPLY
FILTER
RGB AMP
P in P IC
VCOM AMP
LCD PANEL
CWX3056
CN4801
IC4001
TC90A64AF-P
TFT Controller
D/A10bit
RGB OverLay&Cont
Video
2M DRAM
A/D8bit
Multi Processing P in P
NTSC Dec
Y/C Separation
OSD Interface
RESET
IC4602
EEP-ROM
IC4551
IC4142
IC4601
IC4651
AVIC-N2/XU/UC
E TERMINAL

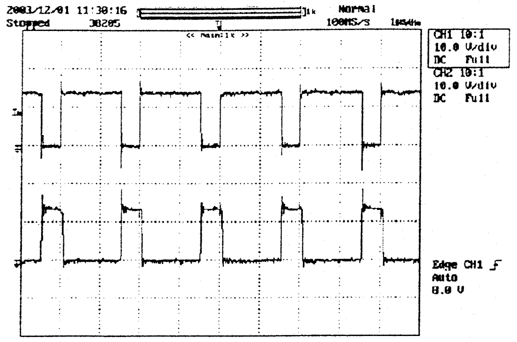
→ V Composite Video Signal
→ R RGB Signal

MONITOR UNIT
Consists of
MONITOR PCB
UPPER PCB
INVERTER PCB

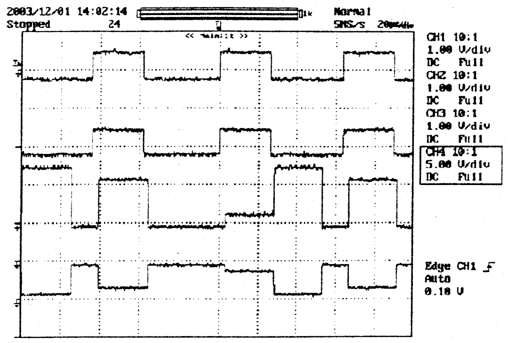
● Waveforms

The encircled number denote measuring pointes in the circuit diagram.

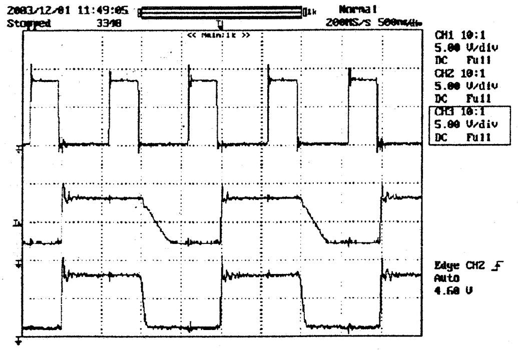
Ⓐ CH1:IC4851 Pin 4
Ⓑ CH2:Q4851 Pin 5



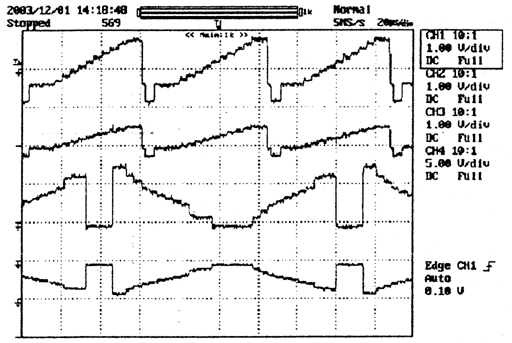
• INPUT : Color bar signal
Ⓘ CH1:ANG
Ⓙ CH2:ANG3
Ⓚ CH3:GOUT
Ⓛ CH4:VG



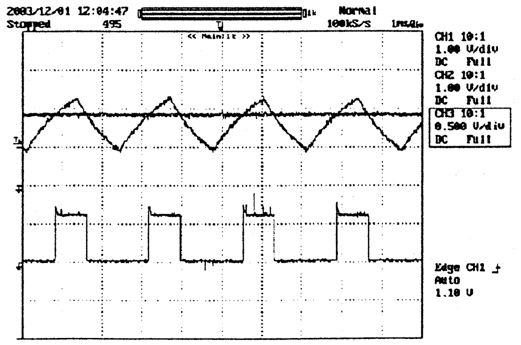
Ⓒ CH1:IC4861 Pin 15
Ⓓ CH2:IC4861 Pin 12
Ⓔ CH3:IC4861 Pin 10



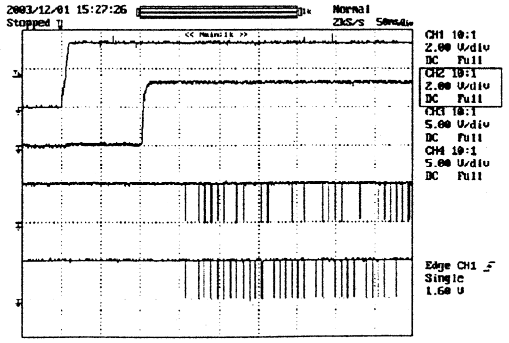
• INPUT : 10STEP VTR IN
Ⓜ CH1:CVBS
Ⓝ CH2:CVBS3
Ⓚ CH3:GOUT
Ⓛ CH4:VG



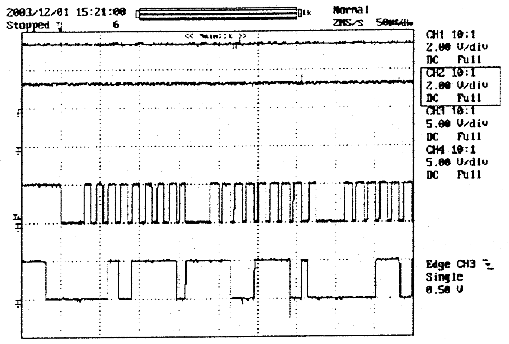
Ⓕ CH1:IC4901 Pin 2
Ⓖ CH2:IC4901 Pin 6
Ⓗ CH3:IC4901 Pin 7



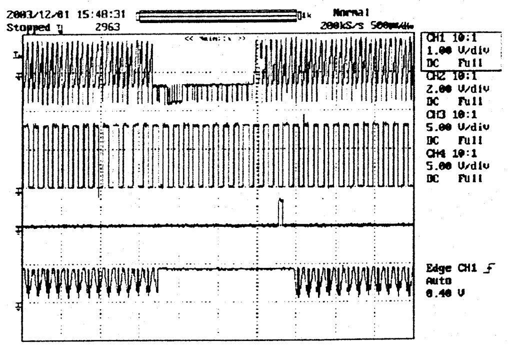
Ⓞ CH1:V33
Ⓟ CH2:PIPRES
Ⓠ CH3:PIPCK
Ⓡ CH4:PIPDA



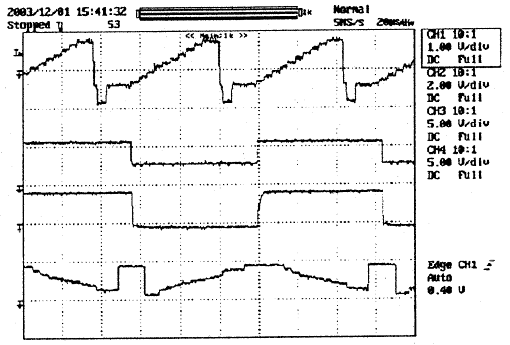
Ⓞ CH1:V33
Ⓟ CH2:PIPRES
Ⓠ CH3:PIPCK
Ⓡ CH4:PIPDA



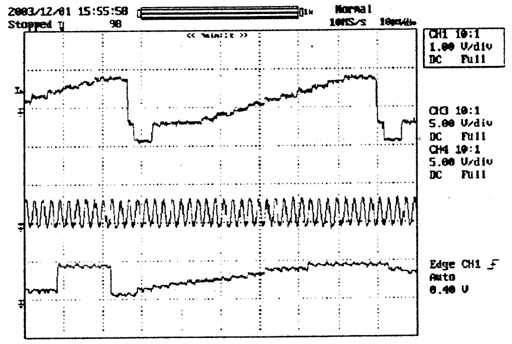
Ⓜ CH1:CVBS
Ⓤ CH2:CX
Ⓦ CH3:STV1
Ⓛ CH4:VG



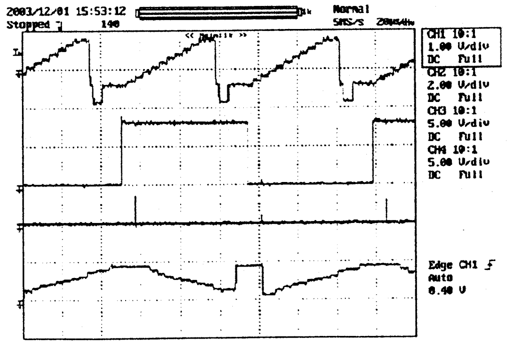
Ⓜ CH1:CVBS
Ⓢ CH2:POL
Ⓣ CH3:VCOM
Ⓛ CH4:VG



Ⓜ CH1:CVBS
Ⓧ CH3:CPH
Ⓛ CH4:VG

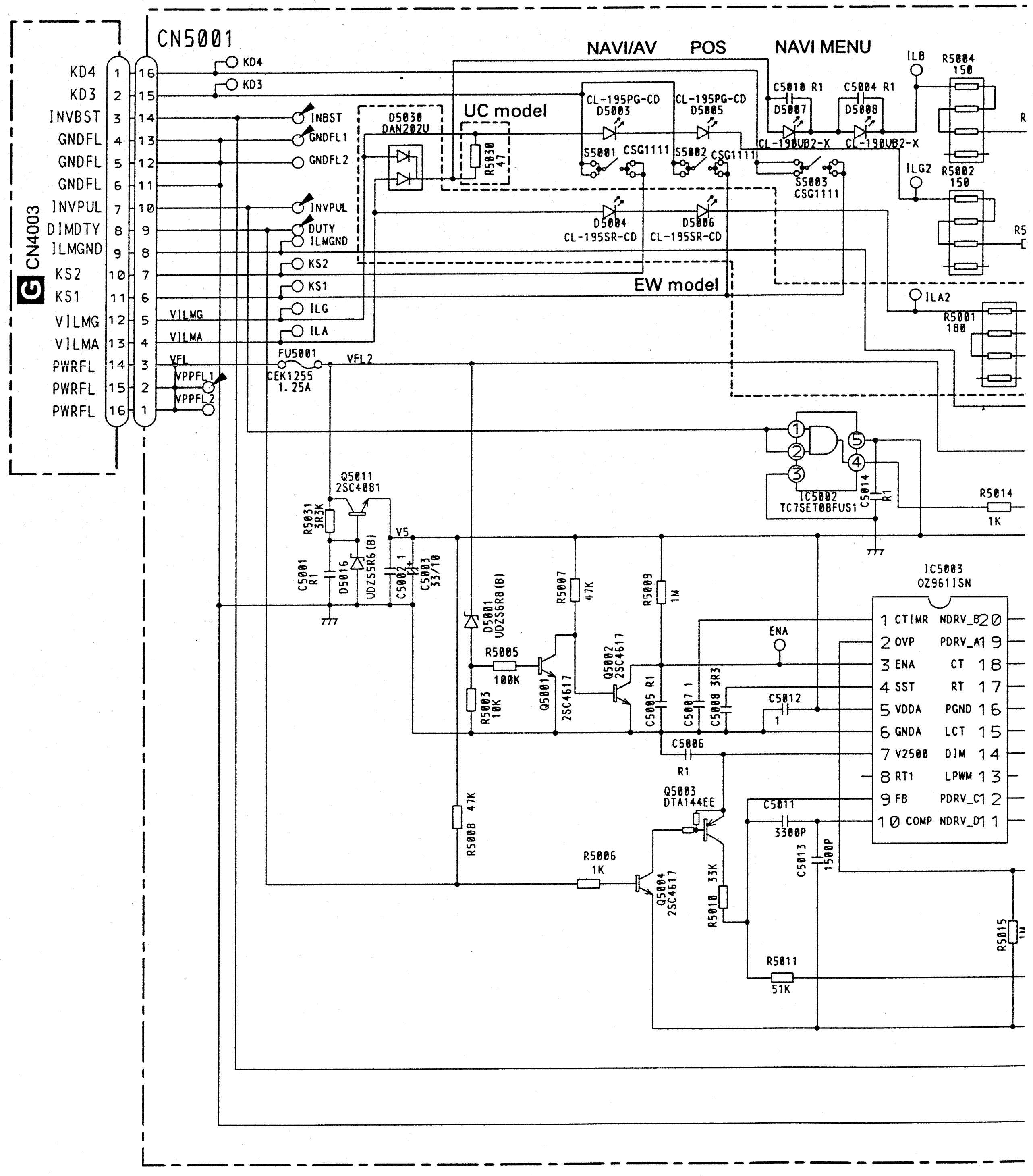


Ⓜ CH1:CVBS
Ⓤ CH2:CX
Ⓥ CH3:STH1
Ⓛ CH4:VG

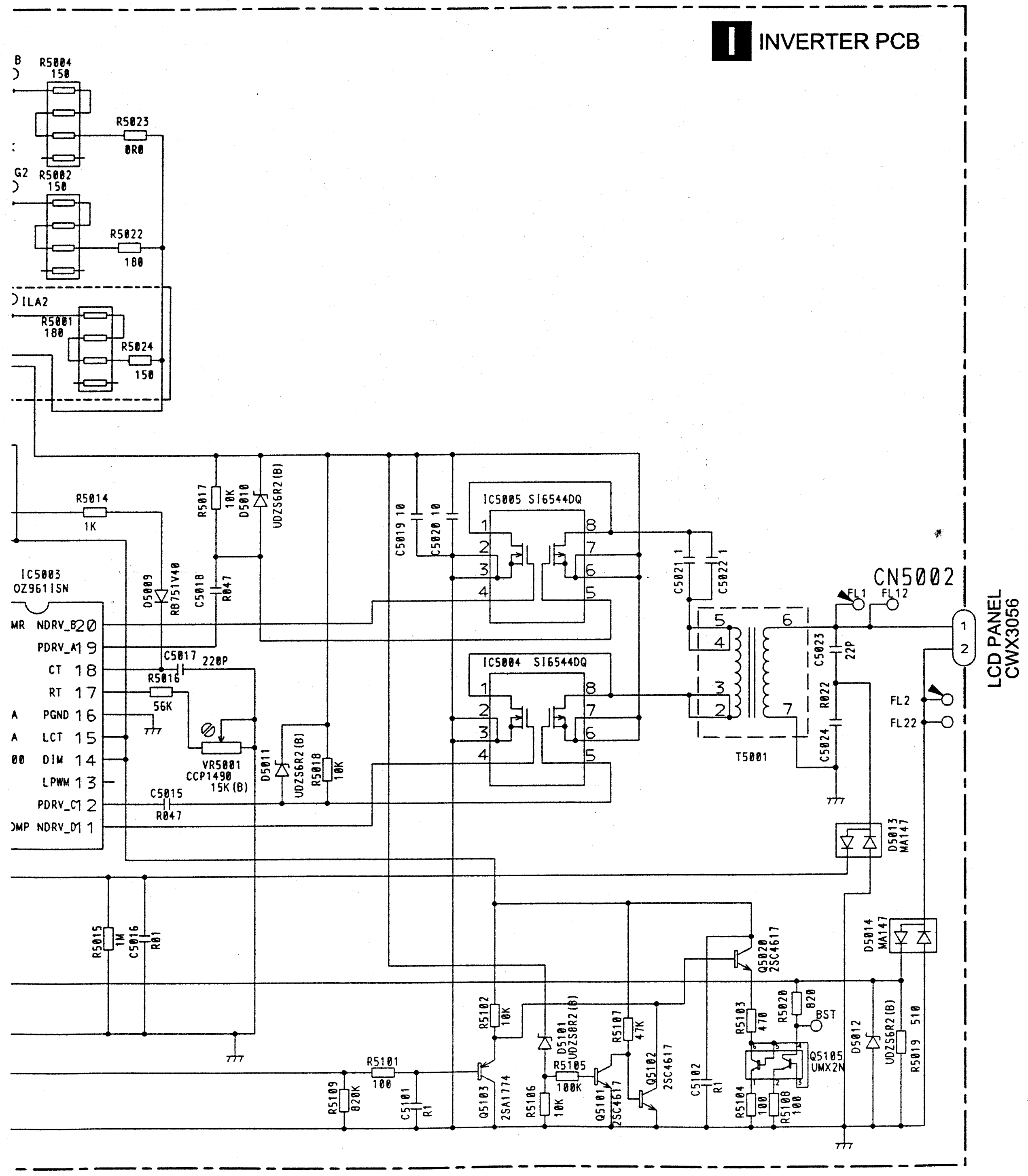


3.17 INVERTER PCB

MONITOR UNIT
Consists of
MONITOR PCB
UPPER PCB
INVERTER PCB

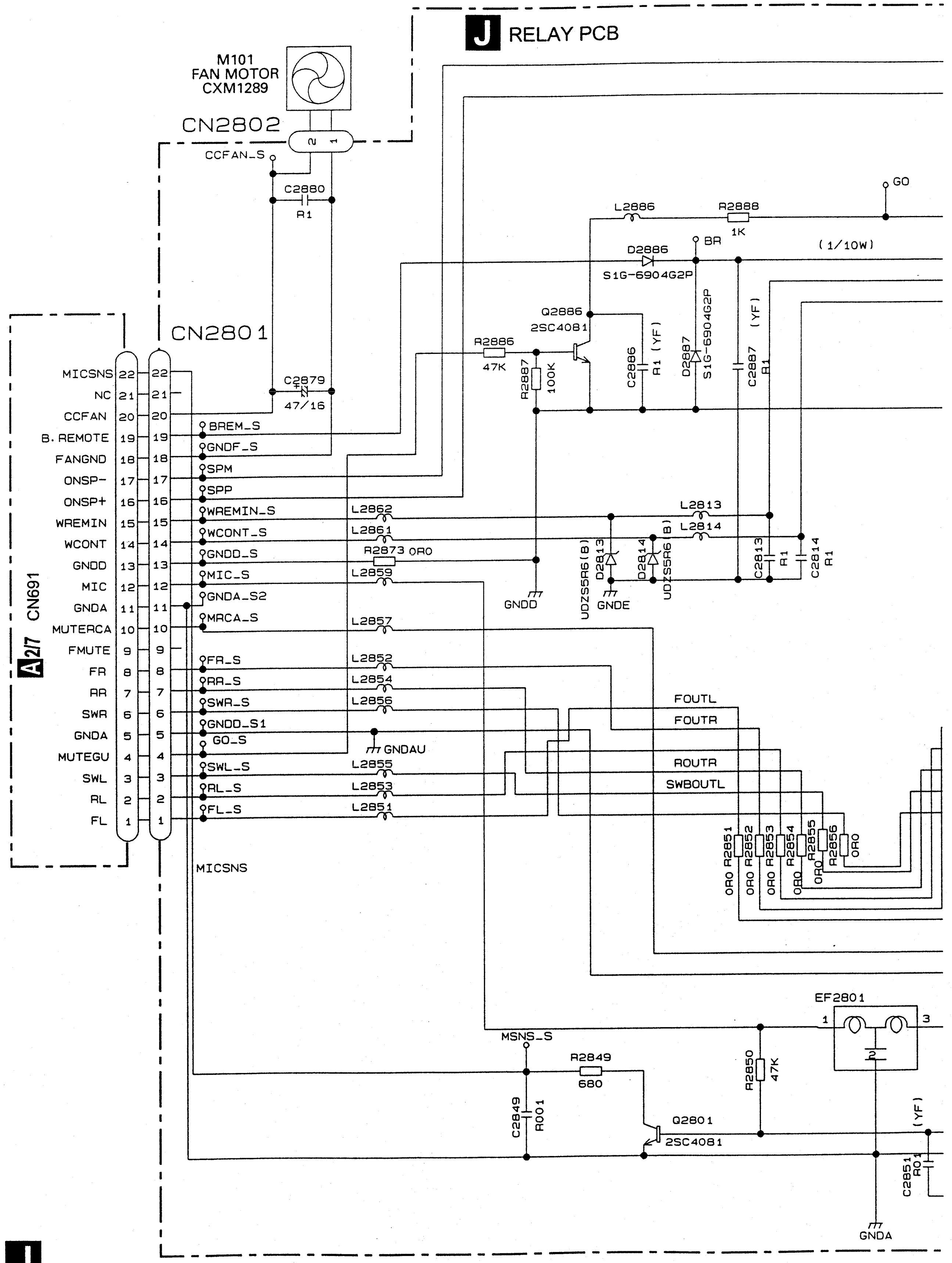


G CN4003
KD4
KD3
INVBST
GNDFL
GNDFL
GNDFL
INVPUL
DIMDTY
ILMGND
KS2
KS1
VILMG
VILMA
PWRFL
PWRFL
PWRFL
CN5001
KD4
KD3
INBST
GNDFL1
GNDFL2
INVPUL
DUTY
ILMGND
KS2
KS1
ILG
ILA
VILMG
VILMA
VFL
VPPFL1
VPPFL2
FU5001
CEK1255
1.25A
VFL2
D5030
DAN202U
UC model
R5030
47
NAVI/AV
POS
NAVI MENU
CL-195PG-CD
D5003
CL-195PG-CD
D5005
S5001 CSG1111
S5002 CSG1111
C5010 R1
D5007
CL-190UB2-X
C5004 R1
D5008
CL-190UB2-X
S5003
CSG1111
D5004
CL-195SR-CD
D5006
CL-195SR-CD
EW model
ILB
R5004
150
ILG2
R5002
150
ILA2
R5001
180
IC5002
TC7SET08FUS1
C5014
R1
R5014
1K
Q5011
2SC4081
R5031
3R3K
V5
C5001
R1
D5016
UDZS5R6(B)
C5002 1
C5003
33/10
D5001
UDZS8R8(B)
R5007
47K
R5009
1M
R5005
100K
Q5001
2SC4617
Q5002
2SC4617
R5003
10K
C5005 R1
C5007 1
C5008 3R3
ENA
C5012
1
C5006
R1
Q5003
DTA144EE
C5011
3300P
C5013
1500P
R5008 47K
R5006
1K
Q5004
2SC4617
R5010 33K
R5011
51K
R5015
1M
IC5003
OZ9611SN
1 CTIMR
2 OVP
3 ENA
4 SST
5 VDDA
6 GNDA
7 V2500
8 RT1
9 FB
10 COMP
NDRV_B 20
PDRV_A 19
CT 18
RT 17
PGND 16
LCT 15
DIM 14
LPWM 13
PDRV_C 12
NDRV_D 11

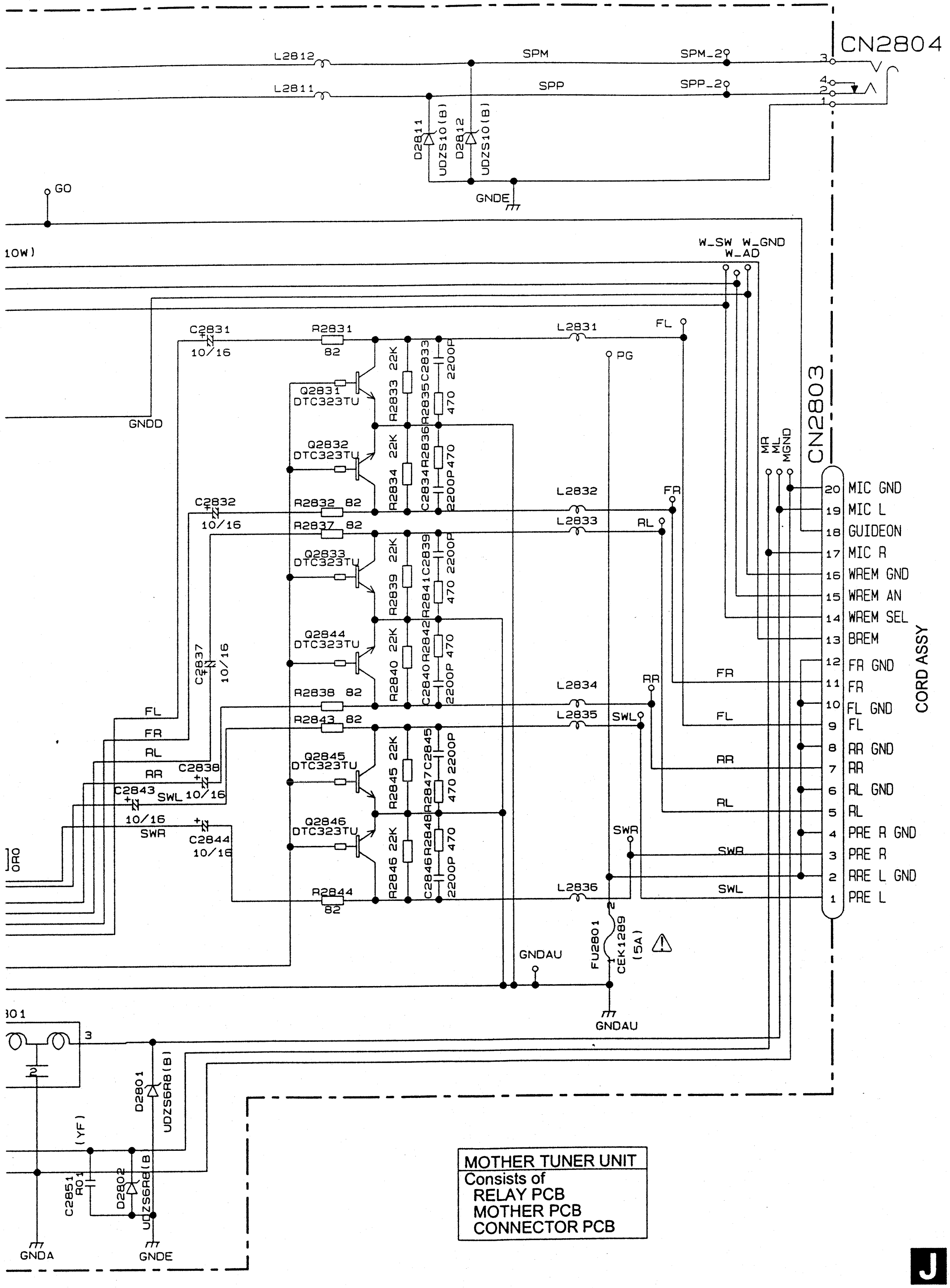


I INVERTER PCB
R5004
150
R5023
0R0
R5002
150
R5022
180
ILA2
R5001
180
R5024
150
R5014
1K
R5017
10K
D5010
UDZS6R2(B)
D5009
RB751V40
C5018
R047
C5019 10
C5020 10
IC5005 SI6544DQ
IC5004 SI6544DQ
C5021 1
C5022 1
CN5002
FL1
FL12
LCD PANEL
CWX3056
FL2
FL22
T5001
C5023
22P
R022
C5024
IC5003
OZ9611SN
C5017 220P
R5016
56K
VR5001
CCP1490
15K(B)
D5011
UDZS6R2(B)
R5018
10K
C5015
R047
D5013
MA147
D5014
MA147
R5015
1M
C5016
R01
Q5020
2SC4617
R5020
820
BST
R5103
470
Q5105
UMX2N
R5102
10K
D5101
UDZS8R2(B)
R5107
47K
R5105
100K
Q5102
2SC4617
C5102
R1
R5101
100
R5109
820K
C5101
R1
Q5103
2SA1774
R5106
10K
Q5101
2SC4617
R5104
100
R5108
100
D5012
UDZS6R2(B)
R5019
510

3.18 RELAY PCB

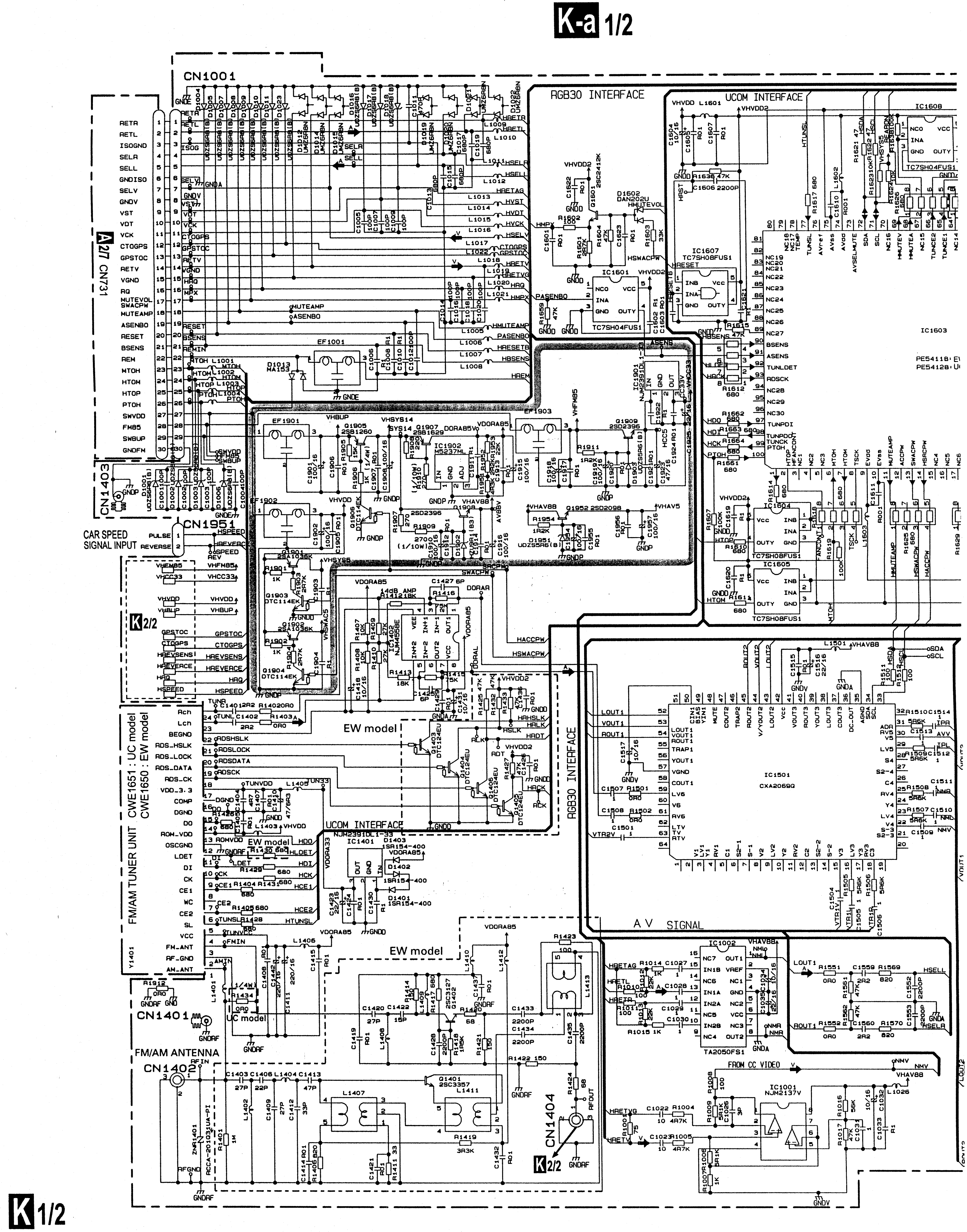


J RELAY PCB
M101
FAN MOTOR
CXM1289
CN2802
CCFAN_S
C2880
R1
CN2801
C2879
47/16
A 2/7 CN691
MICSNS 22
NC 21
CCFAN 20
B. REMOTE 19
FANGND 18
ONSP- 17
ONSP+ 16
WREMIN 15
WCONT 14
GNDD 13
MIC 12
GNDA 11
MUTERCA 10
FMUTE 9
FR 8
RR 7
SWR 6
GNDA 5
MUTEGU 4
SWL 3
RL 2
FL 1
BREM_S
GNDF_S
SPM
SPP
WREMIN_S
WCONT_S
GNDD_S
MIC_S
GNDA_S2
MRCA_S
FR_S
RR_S
SWR_S
GNDD_S1
GO_S
SWL_S
RL_S
FL_S
MICSNS
L2862
L2861
R2873 ORO
L2859
L2857
L2852
L2854
L2856
L2855
L2853
L2851
GNDAU
GNDD
GNDE
L2886
R2888
1K
GO
D2886
S1G-6904G2P
BR
(1/10W)
Q2886
2SC4081
R2886
47K
R2887
100K
C2886
R1 (YF)
D2887
S1G-6904G2P
C2887 (YF)
R1
L2813
L2814
D2813
UDZS5R6(B)
D2814
UDZS5R6(B)
C2813
R1
C2814
R1
FOUTL
FOUTR
ROUTR
SWBOUTL
R2851 ORO
R2852 ORO
R2853 ORO
R2854 ORO
R2855 ORO
R2856 ORO
EF2801
1
3
2
MSNS_S
R2849
680
C2849
R001
R2850
47K
Q2801
2SC4081
(YF)
C2851
R01
GNDA



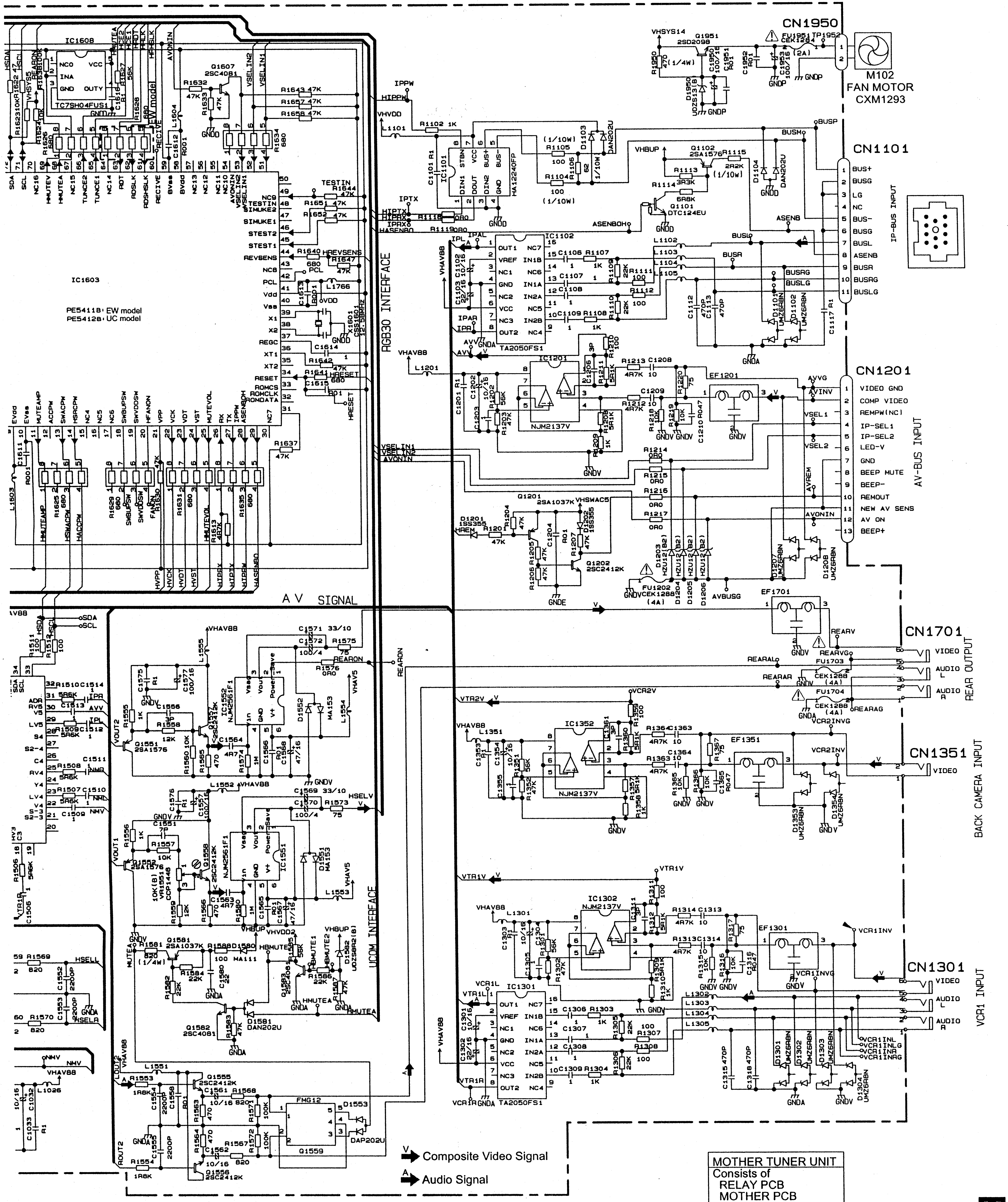
CN2804
L2812
L2811
SPM
SPP
SPM_2
SPP_2
3
4
2
1
D2811
UDZS10(B)
D2812
UDZS10(B)
GNDE
GO
10W)
W_SW
W_GND
W_AD
CN2803
MR
ML
MGND
GNDD
C2831
10/16
R2831
82
L2831
FL
PG
Q2831
DTC323TU
R2833 22K
C2833 2200P
R2835 470
Q2832
DTC323TU
R2834 22K
R2836 470
C2834 2200P
C2832
10/16
R2832 82
R2837 82
L2832
L2833
FR
RL
Q2833
DTC323TU
R2839 22K
C2839 2200P
R2841 470
Q2844
DTC323TU
R2840 22K
R2842 470
C2840 2200P
C2837
10/16
R2838 82
R2843 82
L2834
L2835
RR
SWL
Q2845
DTC323TU
R2845 22K
C2845 2200P
R2847 470
Q2846
DTC323TU
R2846 22K
R2848 470
C2846 2200P
C2838
10/16
C2843
10/16
C2844
10/16
SWR
R2844
82
L2836
FU2801
CEK1289
(5A)
GNDAU
20 MIC GND
19 MIC L
18 GUIDEON
17 MIC R
16 WREM GND
15 WREM AN
14 WREM SEL
13 BREM
12 FR GND
11 FR
10 FL GND
9 FL
8 RR GND
7 RR
6 RL GND
5 RL
4 PRE R GND
3 PRE R
2 PRE L GND
1 PRE L
CORD ASSY
ORO
801
3
2
D2801
UDZS6R8(B)
(YF)
C2851
R01
D2802
UDZS6R8(B)
GNDA
GNDE
MOTHER TUNER UNIT
Consists of
RELAY PCB
MOTHER PCB
CONNECTOR PCB

3.19 MOTHER PCB (H/A SYSTEM)(GUIDE PAGE)


K-a 1/2
CN1001
RGB30 INTERFACE
UCOM INTERFACE
A 2/7 CN731
CN1403
CN1951
CAR SPEED SIGNAL INPUT
PULSE
REVERSE
K 2/2
FM/AM TUNER UNIT CWE1651 : UC model CWE1650 : EW model
EW model
UC model
CN1401
FM/AM ANTENNA
CN1402
CN1404
IC1401
IC1402 NJM4558E
IC1501 CXA2069Q
IC1601 TC7SH04FUS1
IC1603
IC1604 TC7SH08FUS1
IC1605 TC7SH08FUS1
IC1607 TC7SH08FUS1
IC1608 TC7SH04FUS1
IC1901 NJM2391DL1-33
IC1902 M5237ML
IC1002 TA2050FS1
IC1001 NJM2137V
EF1001
EF1901
EF1902
EF1903
AV SIGNAL
FROM CC VIDEO
K 1/2

K-b 1/2

K 1/2 MOTHER PCB (H/A SYSTEM)


CN1950
M102
FAN MOTOR
CXM1293
CN1101
IP-BUS INPUT
BUS+
BUSG
LG
NC
BUS-
BUSG
BUSL
ASENB
BUSR
BUSRG
BUSLG
CN1201
AV-BUS INPUT
VIDEO GND
COMP VIDEO
REMPW(NC)
IP-SEL1
IP-SEL2
LED-V
GND
BEEP MUTE
BEEP-
REMOUT
NEW AV SENS
AV ON
BEEP+
CN1701
REAR OUTPUT
VIDEO
AUDIO L
AUDIO R
CN1351
BACK CAMERA INPUT
VIDEO
CN1301
VCR1 INPUT
VIDEO
AUDIO L
AUDIO R
IC1608
TC7SH04FUS1
IC1603
PE5411B : EW model
PE5412B : UC model
IC1101
HA12240FP
IC1102
TA2050FS1
IC1201
NJM2137V
IC1352
NJM2137V
IC1302
NJM2137V
IC1301
TA2050FS1
IC1552
NJM2561F1
IC1551
NJM2561F1
FMG12
RGB30 INTERFACE
UCOM INTERFACE
AV SIGNAL
EF1201
EF1701
EF1351
EF1301
Q1951 2SD2098
Q1102 2SA1576
Q1101 DTC124EU
Q1201 2SA1037K
Q1202 2SC2412K
Q1551 2SA1576
Q1552 2SA1576
Q1581 2SA1037K
Q1582 2SC4081
Q1555 2SC2412K
Q1556 2SC2412K
Q1559
Q1607 2SC4081
FU1951 CEK1284 (2A)
FU1202 CEK1288 (4A)
FU1703 CEK1288 (4A)
FU1704 CEK1288 (4A)

Composite Video Signal

Audio Signal

MOTHER TUNER UNIT
Consists of
RELAY PCB
MOTHER PCB
CONNECTOR PCB

A

K-b 1/2

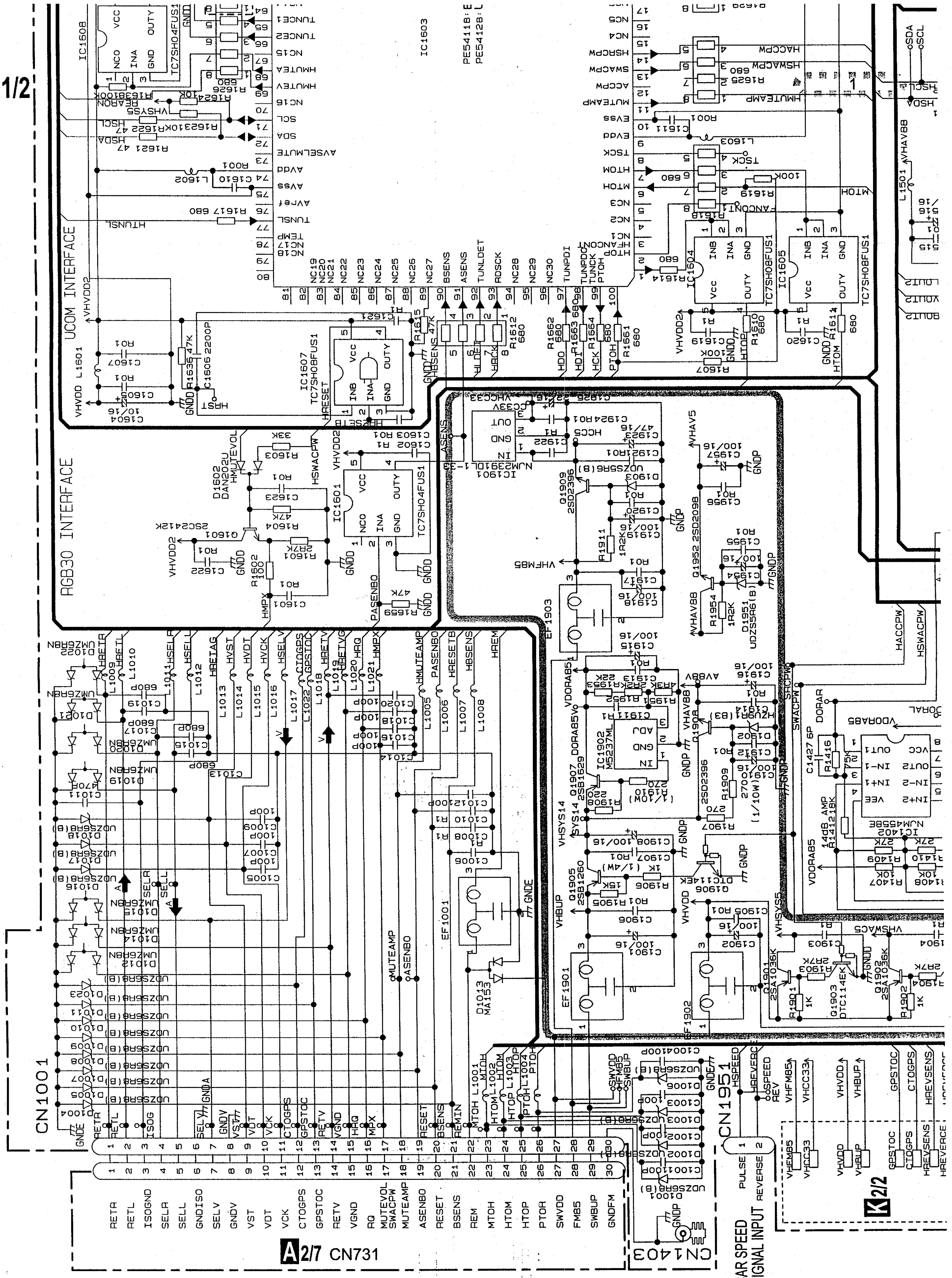
B

C

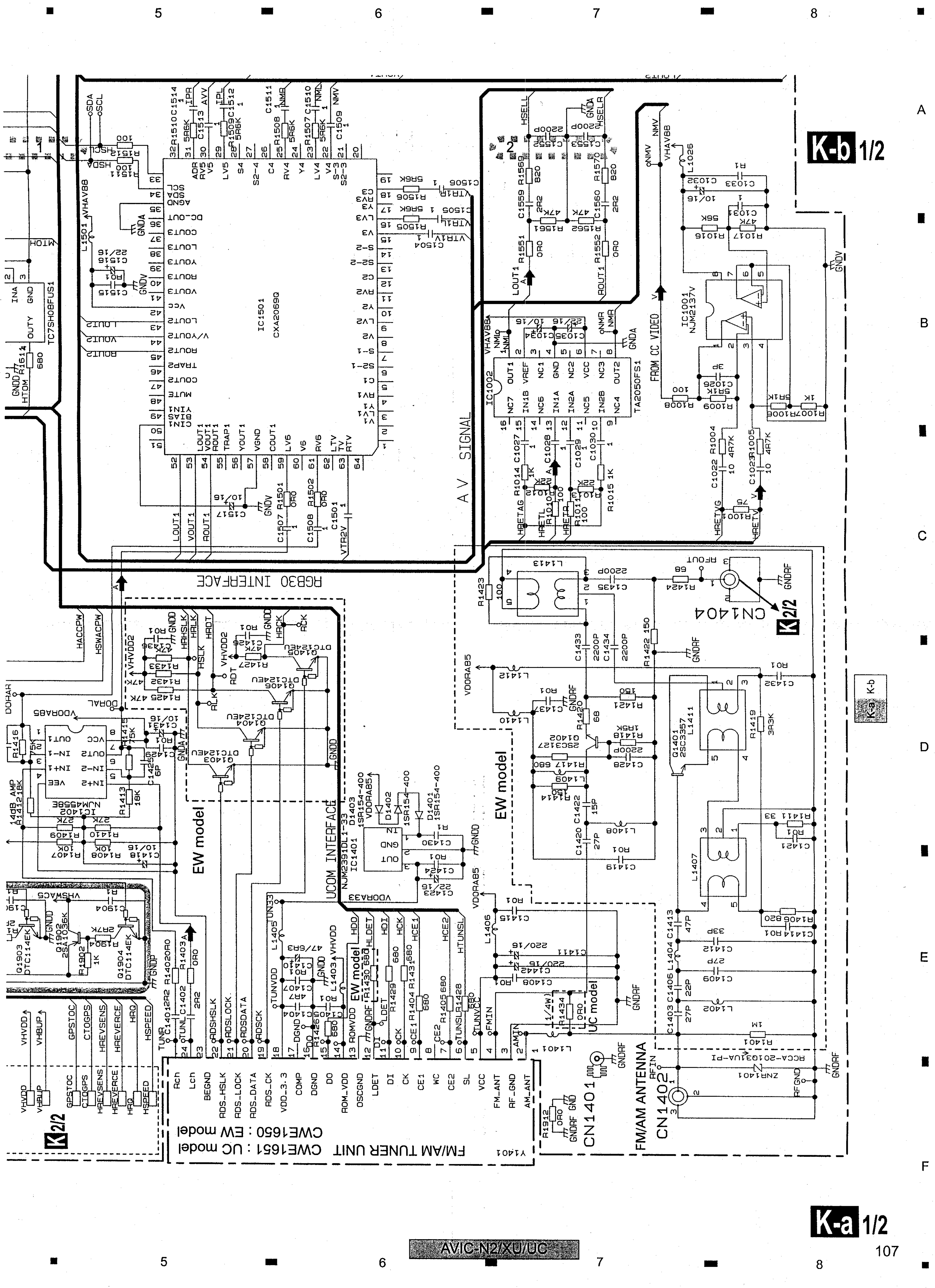
D

E

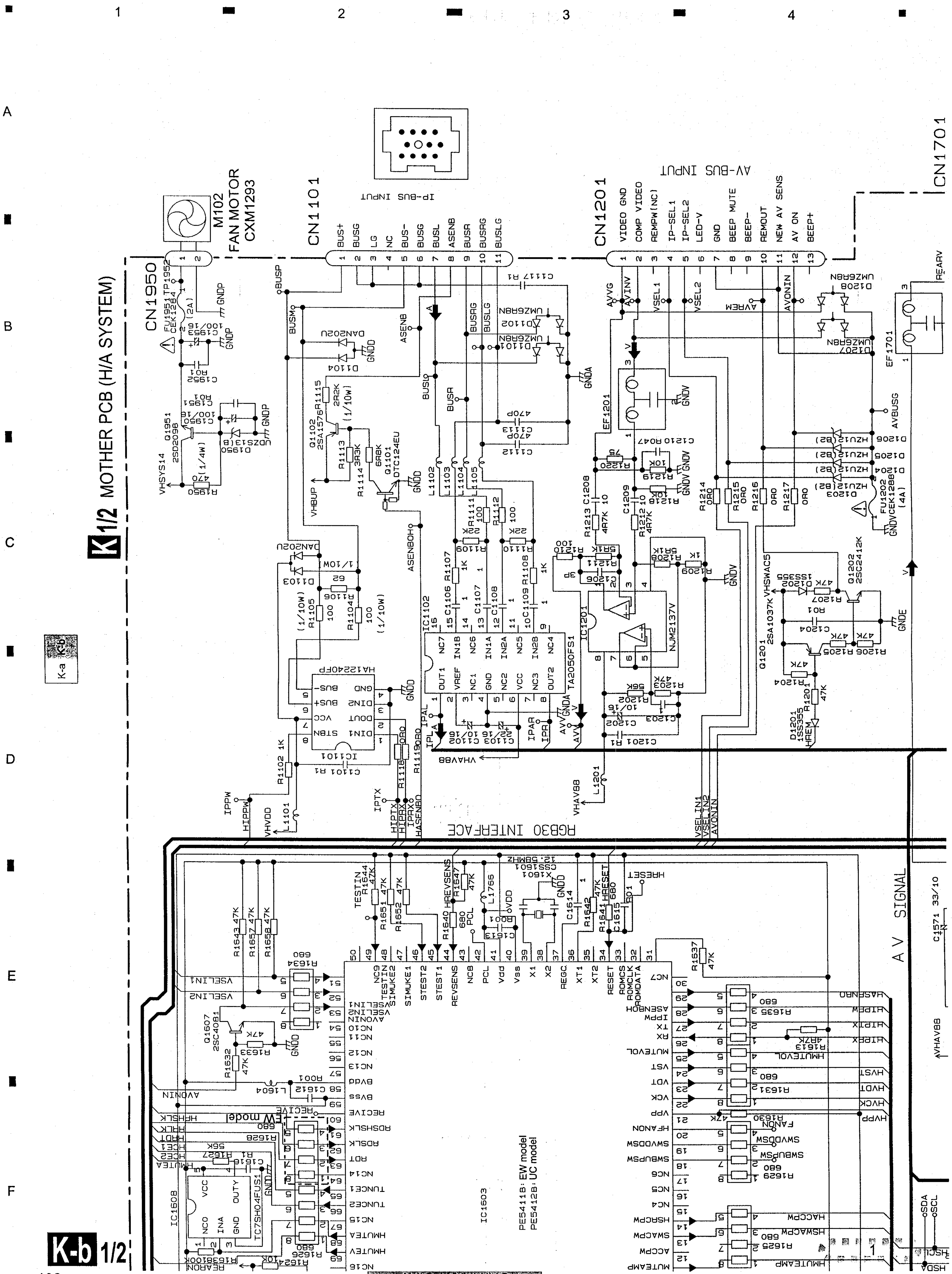
F

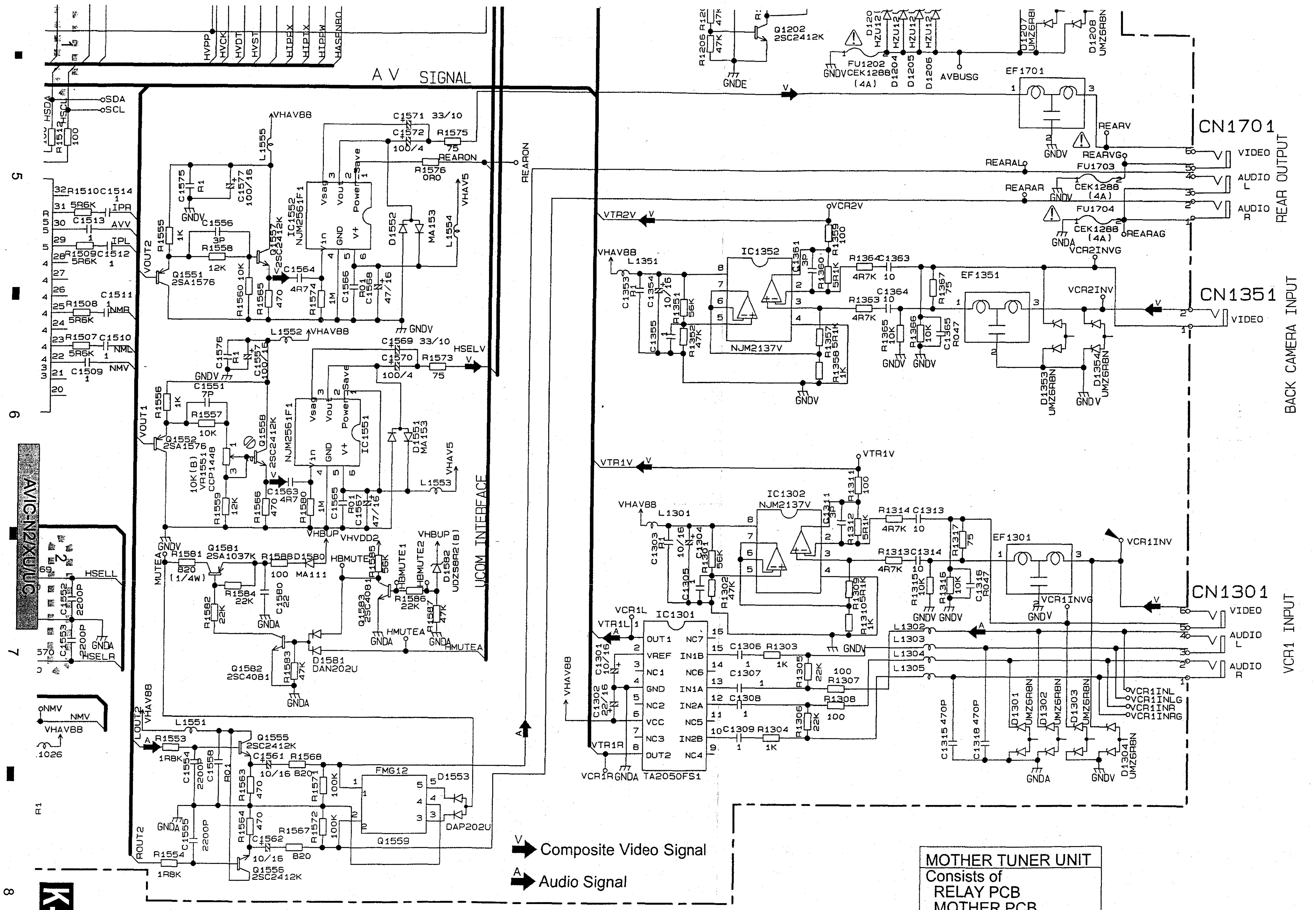

UCOM INTERFACE
RGB30 INTERFACE
IC1603
PE5411B: E
PE5412B: UC
IC1608 TC7SH04FUS1
IC1607 TC7SH08FUS1
IC1601 TC7SH04FUS1
IC1604 TC7SH08FUS1
IC1605 TC7SH08FUS1
IC1901 NJM2391DL1-33
IC1902 M5237ML
IC1402 NJM4558E
EF1901
EF1902
EF1903
EF1001
CN1001
CN1951
CN1403
A 2/7 CN731
K 2/2
CAR SPEED SIGNAL INPUT
PULSE
REVERSE
RETR
RETL
ISOGND
SELR
SELL
GNDISO
SELV
GNDV
VST
VDT
VCK
CTOGPS
GPSTOC
RETV
VGND
RQ
MUTEVOL SWACPW
MUTEAMP
ASENBO
RESET
BSENS
REM
MTOH
HTOM
HTOP
PTOH
SWVDD
FM85
SWBUP
GNDFM
K-a
K-b

K-a 1/2


5
6
7
8
A
B
C
D
E
F
K-b 1/2
IC1501
CXA2069Q
AV SIGNAL
RGB30 INTERFACE
IC1002
TA2050FS1
FROM CC VIDEO
IC1001
NJM2137V
CN1404
K 2/2
K-b
IC1402
NJM4558E
14dB AMP
EW model
UCOM INTERFACE
IC1401
NJM2391DL1-33
EW model
UC model
FM/AM TUNER UNIT CWE1651 : UC model
CWE1650 : EW model
Y1401
CN1401
FM/AM ANTENNA
CN1402
K 2/2
TC7SH08FUS1

K-a 1/2


K 1/2 MOTHER PCB (H/A SYSTEM)
K-b 1/2
K-a
K-b
M102
FAN MOTOR
CXM1293
CN1950
CN1101
IP-BUS INPUT
BUS+
BUSG
LG
NC
BUS-
BUSG
BUSL
ASENB
BUSR
BUSRG
BUSLG
CN1201
AV-BUS INPUT
VIDEO GND
COMP VIDEO
REMPW(NC)
IP-SEL1
IP-SEL2
LED-V
GND
BEEP MUTE
BEEP-
REMOUT
NEW AV SENS
AV ON
BEEP+
CN1701
EF1701
EF1201
IC1101
HA12240FP
IC1102
TA2050FS1
IC1201
NJM2137V
Q1101
DTC124EU
Q1102
2SA1576
Q1201
2SA1037K
Q1202
2SC2412K
Q1607
2SC4081
Q1951
2SD2098
FU1951
CEK1284
FU1202
CEK1288
RGB30 INTERFACE
AV SIGNAL
IC1603
PE5411B: EW model
PE5412B: UC model
EW model
IC1608
TC7SH04FUS1
X1601
CSS1601
12.58MHz
A
B
C
D
E
F
1
2
3
4


AV SIGNAL
HVPP
HVCK
HVDT
HVST
HIPFX
HIPTX
HIPEW
HASENBO
SDA
SCL
HSDA
HSCL
R1512
100
R1510 C1514
5R6K
IPR
C1513
AVV
IPL
R1509 C1512
5R6K
C1511
R1508
5R6K
NMR
R1507 C1510
5R6K
NML
C1509
NMV
VHAV88
L1555
C1575
R1
C1577 100/16
GNDV
C1556
3P
R1558
12K
R1555
1K
VOUT2
Q1551
2SA1576
Q1557
2SC2412K
C1564
4R7
R1560 10K
R1565
470
R1574
1M
C1566
R01
C1568
47/16
IC1552
NJM2561F1
Vsag
Vout
Power Save
Vin
GND
V+
C1571 33/10
C1572
100/4
R1575
75
REARON
R1576
0R0
D1552
MA153
VHAV5
L1554
GNDV
L1552
VHAV88
C1576
R1
C1578 100/16
C1569 33/10
C1570
100/4
R1573
75
HSELV
GNDV
C1551
7P
R1556
1K
R1557
10K
VOUT1
Q1552
2SA1576
10K(B)
VR1551
CCP1448
Q1558
2SC2412K
NJM2561F1
IC1551
C1563
4R7
R1559
12K
R1566
470
R1580
1M
C1565
R01
C1567
47/16
D1551
MA153
VHAV5
L1553
UCOM INTERFACE
VHBUP
VHVDD2
GNDV
MUTEA
R1581
820 (1/4W)
Q1581
2SA1037K
R1588
100
D1580
MA111
HBMUTE
R1585
56K
HBMUTE1
HBMUTE2
VHBUP
D1582
UDZS8R2(B)
R1584
22K
C1580
22
GNDA
R1582
22K
Q1583
2SC4081
R1586
22K
R1587
47K
HMUTEA
GNDA
Q1582
2SC4081
R1583
47K
GNDA
D1581
DAN202U
HMUTEA
HSELL
C1552
2200P
C1553
2200P
GNDA
HSELR
NMV
VHAV88
L1026
VHAV88
LOUT2
L1551
R1553
1R8K
C1554
2200P
C1558
R01
Q1555
2SC2412K
C1561
10/16
R1568
820
R1563
470
R1571
100K
FMG12
D1553
DAP202U
Q1559
GNDA
C1555
2200P
R1564
470
C1562
10/16
R1567
820
R1572
100K
ROUT2
R1554
1R8K
Q1556
2SC2412K
REARON
R1206
R120
47K
GNDE
Q1202
2SC2412K
D120
HZU12
D1204
D1205
D1206
FU1202
CEK1288
(4A)
GNDV
AVBUSG
D1207
UMZ6RB
D1208
UMZ6RBN
EF1701
REARV
GNDV
REARVG
FU1703
REARAL
REARAR
CEK1288
(4A)
GNDV
FU1704
CEK1288
(4A)
GNDA
REARAG
CN1701
VIDEO
AUDIO L
AUDIO R
REAR OUTPUT
VCR2V
VTR2V
R1359
100
VHAV88
L1351
IC1352
C1361
3P
R1360
5R1K
R1364
4R7K
C1363
10
C1353
R1
C1354
10/16
R1351
56K
R1352
47K
C1355
NJM2137V
R1363
4R7K
C1364
10
R1367
75
EF1351
R1355
10K
R1366
10K
C1365
R047
GNDV
R1357
5R1K
R1358
1K
GNDV
VCR2INVG
VCR2INV
D1353
UMZ6RBN
D1354
UMZ6RBN
GNDV
CN1351
VIDEO
BACK CAMERA INPUT
VTR1V
VTR1V
R1311
100
IC1302
NJM2137V
C1311
3P
R1312
5R1K
VHAV88
L1301
C1303
R1
C1304
10/16
R1301
56K
C1305
R1302
47K
R1314
4R7K
C1313
10
R1317
75
EF1301
VCR1INV
R1313
4R7K
C1314
10
R1315
10K
R1316
10K
C1316
R047
GNDV
R1309
5R1K
R1310
1K
GNDV
VCR1INVG
CN1301
VIDEO
AUDIO L
AUDIO R
VCR1 INPUT
VCR1L
VTR1L
IC1301
OUT1
VREF
NC1
GND
NC2
VCC
NC3
OUT2
NC7
IN1B
NC6
IN1A
IN2A
NC5
IN2B
NC4
TA2050FS1
C1306
1
R1303
1K
C1307
1
R1305
22K
R1307
100
C1308
1
R1306
22K
R1308
100
C1309
1
R1304
1K
GNDV
L1302
L1303
L1304
L1305
C1301
10/16
C1302
22/16
VHAV88
VTR1R
VCR1R
GNDA
C1315 470P
C1318 470P
D1301
UMZ6RBN
D1302
UMZ6RBN
D1303
UMZ6RBN
D1304
UMZ6RBN
GNDA
GNDV
VCR1INL
VCR1INLG
VCR1INR
VCR1INRG
5
6
7
8
F
E
D
C
B
A

V Composite Video Signal

A Audio Signal

MOTHER TUNER UNIT

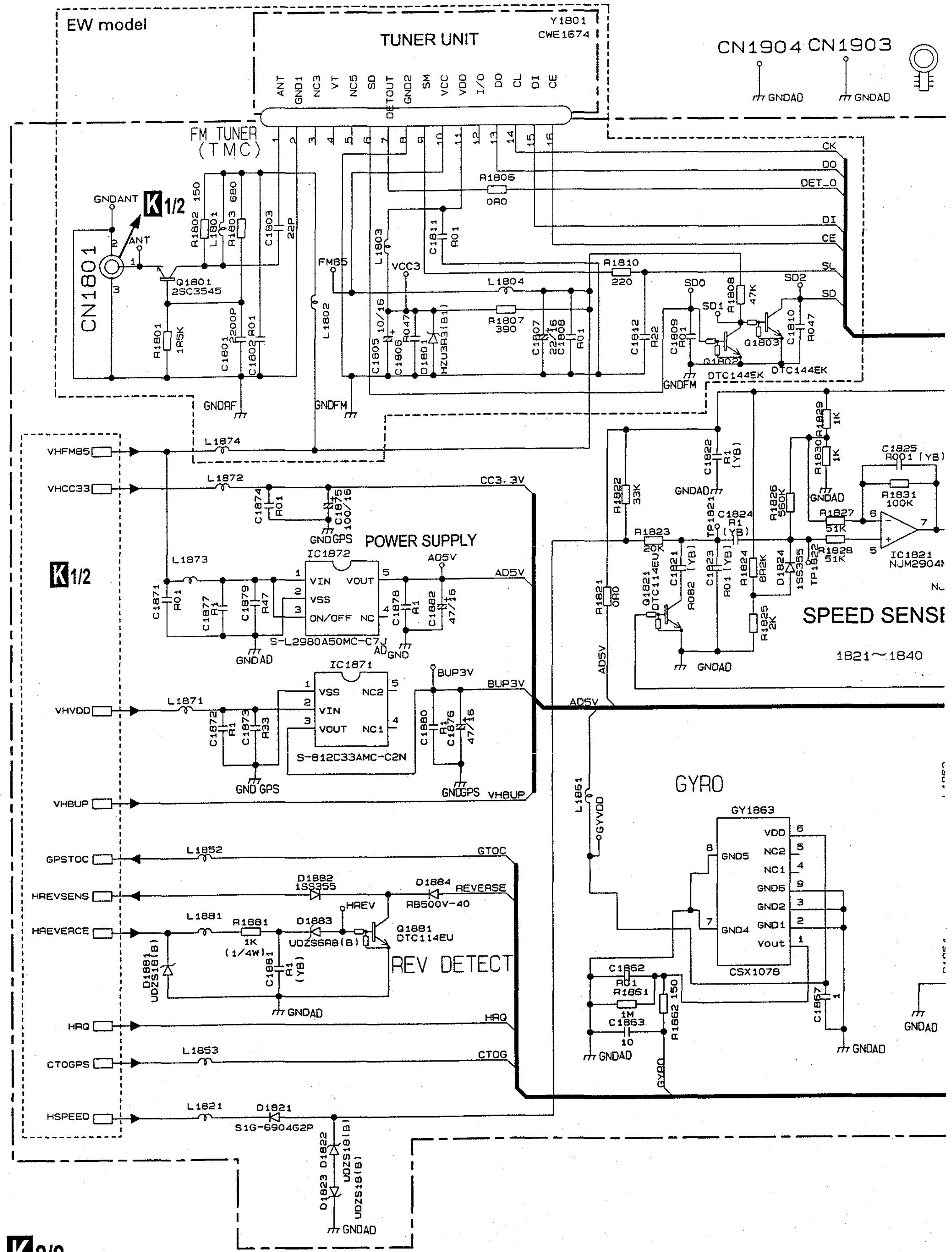
Consists of
RELAY PCB
MOTHER PCB
CONNECTOR PCB

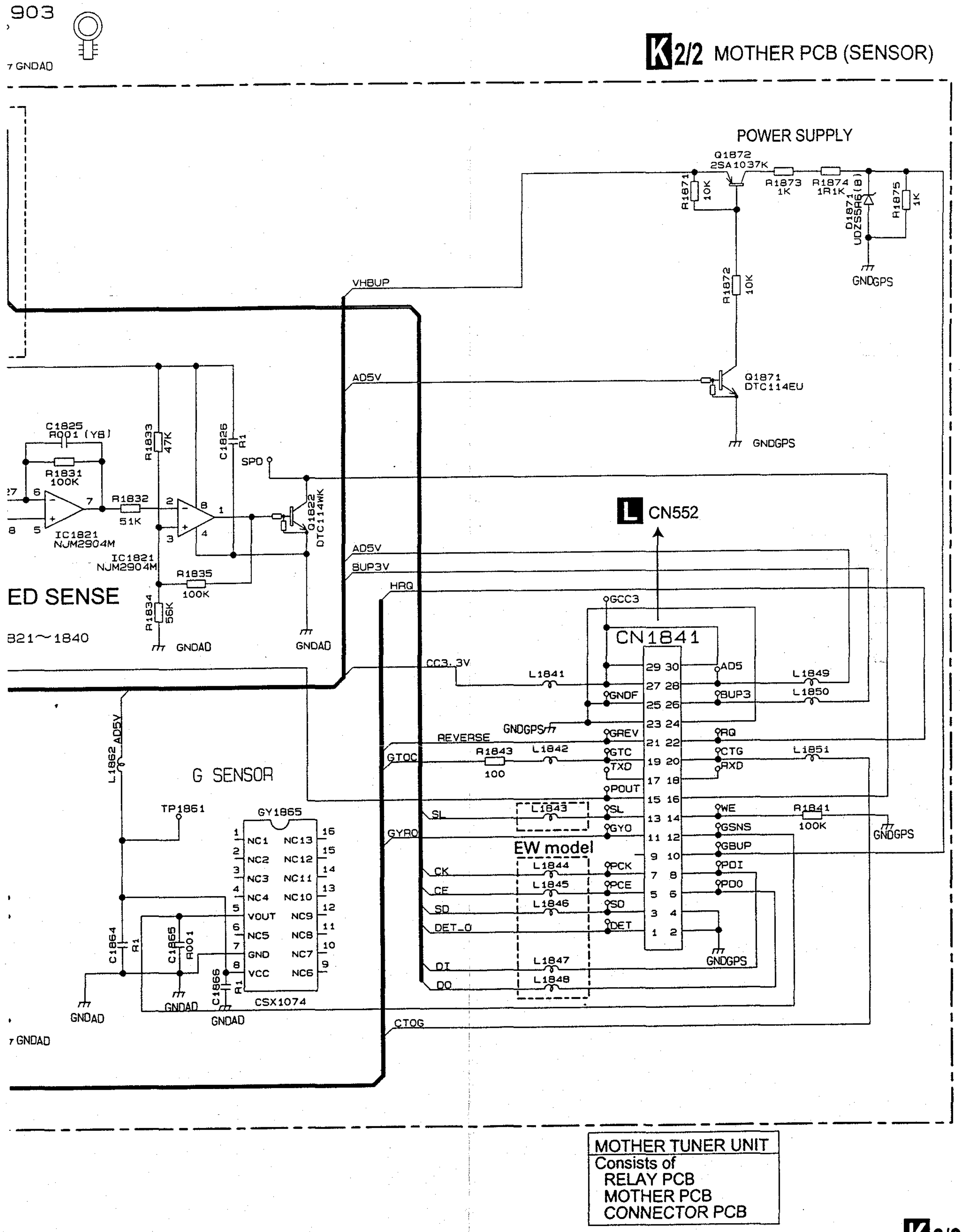
K-a K-b

AVIC-N2XU/UC

K-b 1/2

3.20 MOTHER PCB (SENSOR)

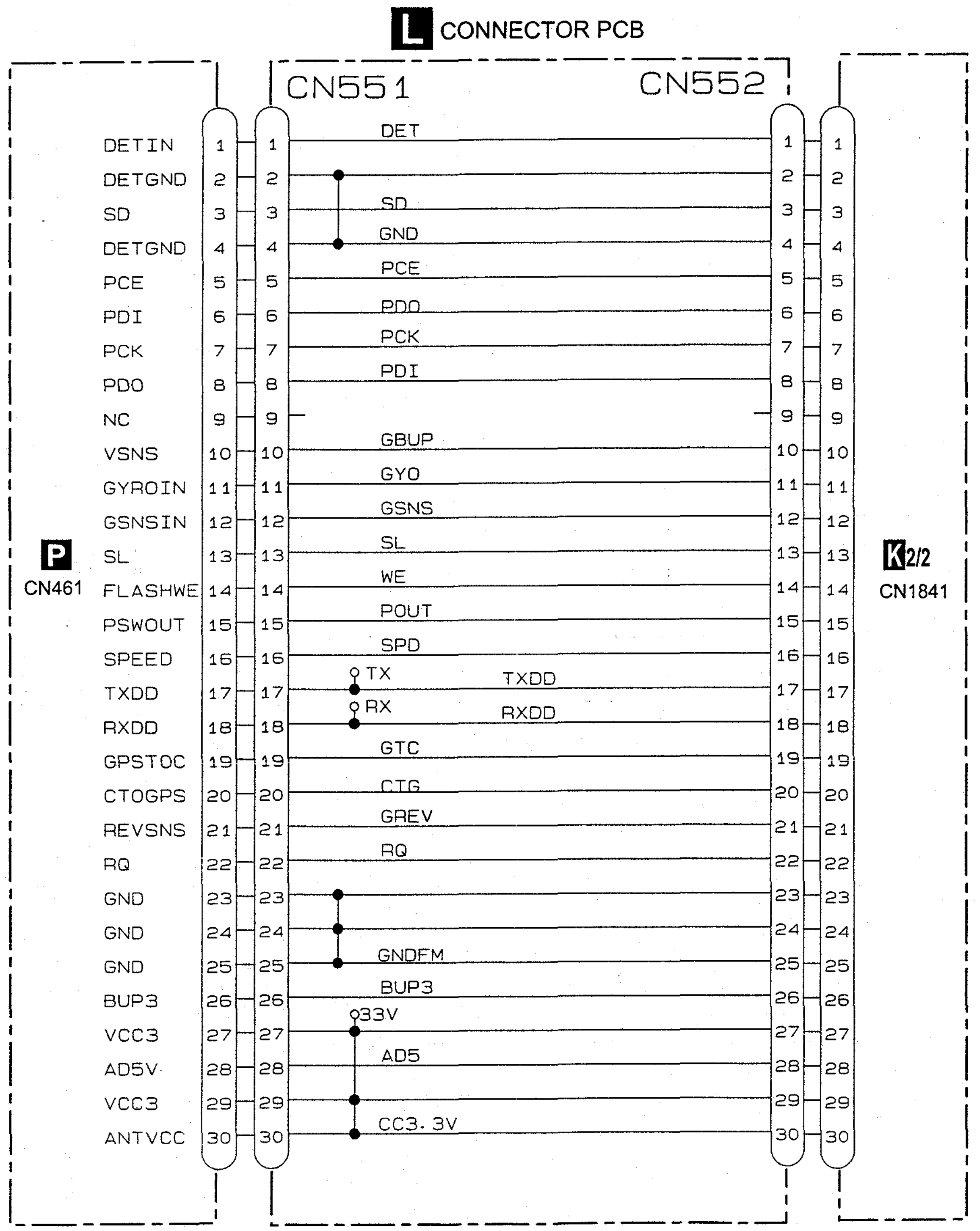

EW model
TUNER UNIT
Y1801 CWE1674
ANT GND1 NC3 VT NC5 SD DETOUT GND2 SM VCC VDD I/O DO CL DI CE
CN1904 CN1903
GNDAD
FM TUNER (TMC)
GNDANT
K 1/2
CN1801
Q1801 2SC3545
CK
DO
DET_O
DI
CE
SL
SD
R1806 0R0
R1810 220
L1804
R1807 390
SD0
SD1
SD2
Q1802 DTC144EK
Q1803 DTC144EK
GNDRF
GNDFM
FM85
VCC3
HZU3R3(B1)
VHFM85
VHCC33
VHVDD
VHBUP
GPSTOC
HREVSENS
HREVERCE
HRQ
CTOGPS
HSPEED
K 1/2
L1874
L1872
CC3.3V
POWER SUPPLY
IC1872
VIN VOUT VSS ON/OFF NC
S-L2980A50MC-C7J
AD5V
GNDGPS
GNDAD
IC1871
VSS NC2 VIN VOUT NC1
S-812C33AMC-C2N
BUP3V
VHBUP
L1873
L1871
SPEED SENSE
1821~1840
IC1821 NJM2904M
Q1821 DTC114EU
D1824 1SS355
GYRO
GY1863
VDD NC2 NC1 GND5 GND6 GND2 GND1 GND4 Vout
CSX1078
L1861
GYVDD
GYRO
L1852
GTOC
D1882 1SS355
D1884 RB500V-40
REVERSE
HREV
L1881
R1881 1K (1/4W)
D1883 UDZS6R8(B)
Q1881 DTC114EU
D1881 UDZS18(B)
REV DETECT
HRQ
L1853
CTOG
L1821
D1821 S1G-6904G2P
D1822 UDZS18(B)
D1823 UDZS18(B)
GNDAD


903
GNDAD
K 2/2 MOTHER PCB (SENSOR)
POWER SUPPLY
Q1872 2SA1037K
R1871 10K
R1873 1K
R1874 1R1K
D1871 UDZS5R6(B)
R1875 1K
GNDGPS
R1872 10K
VHBUP
Q1871 DTC114EU
AD5V
C1825 R001 (YB)
R1831 100K
R1832 51K
IC1821 NJM2904M
R1833 47K
C1826 R1
SPO
Q1822 DTC114WK
R1835 100K
R1834 56K
ED SENSE
821~1840
AD5V
BUP3V
HRQ
L CN552
GCC3
CN1841
CC3.3V
L1841
GNDF
AD5
BUP3
L1849
L1850
REVERSE
GNDGPS
GREV
RQ
R1843 100
L1842
GTC
CTG
TXD
RXD
L1851
POUT
L1843
SL
WE
R1841 100K
GYO
GSNS
GYRO
EW model
GBUP
L1844
PCK
PDI
L1845
PCE
PDO
L1846
SD
DET
CK
CE
SD
DET_O
DI
DO
L1847
L1848
CTOG
G SENSOR
L1862 AD5V
TP1861
GY1865
NC1 NC2 NC3 NC4 VOUT NC5 GND VCC NC13 NC12 NC11 NC10 NC9 NC8 NC7 NC6
CSX1074
GNDAD
MOTHER TUNER UNIT
Consists of
RELAY PCB
MOTHER PCB
CONNECTOR PCB

K 2/2

K 2/2

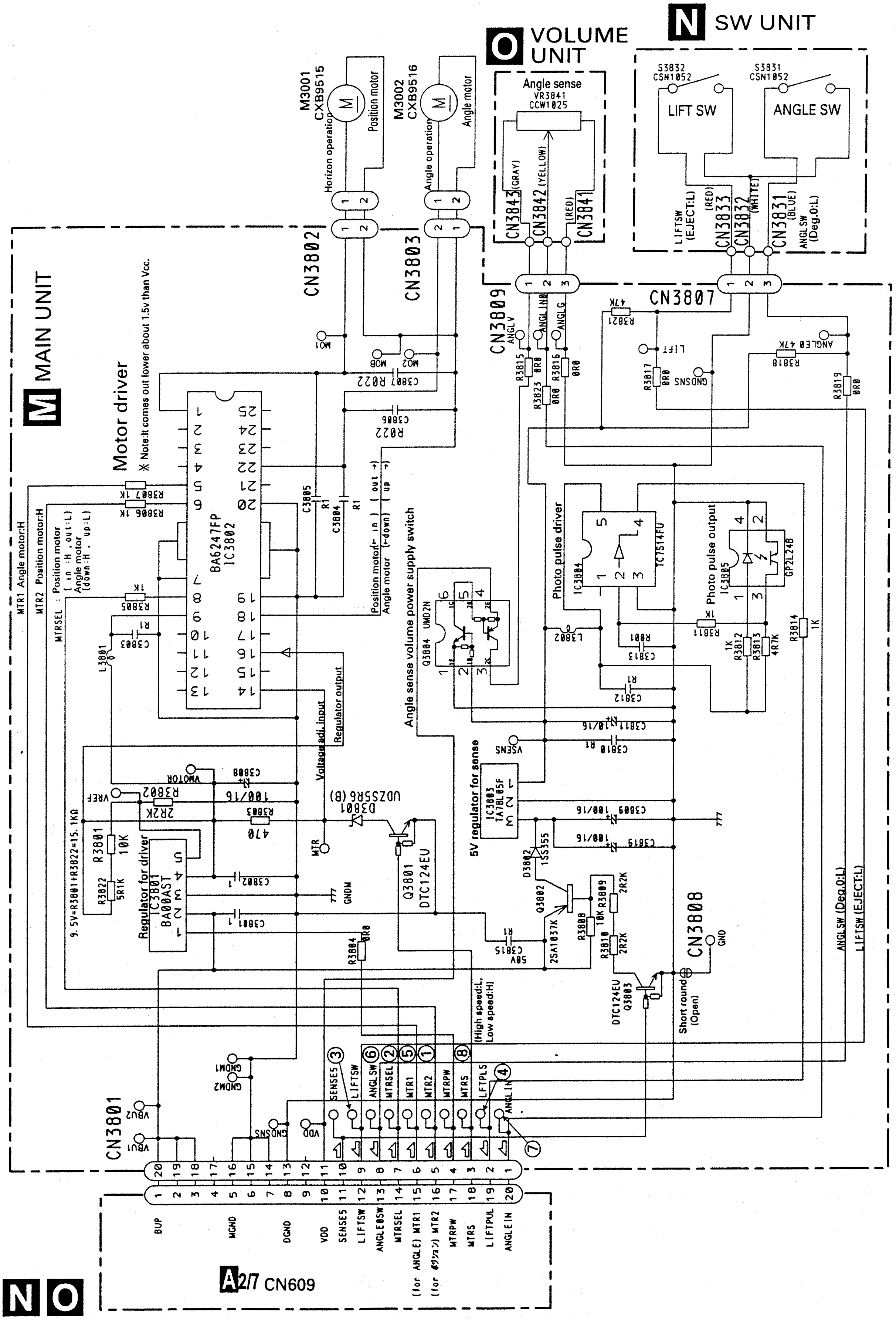
3.21 CONNECTOR PCB


L CONNECTOR PCB
CN551
CN552
P
CN461
K 2/2
CN1841
DETIN
DETGND
SD
DETGND
PCE
PDI
PCK
PDO
NC
VSNS
GYROIN
GSNSIN
SL
FLASHWE
PSWOUT
SPEED
TXDD
RXDD
GPSTOC
CTOGPS
REVSNS
RQ
GND
GND
GND
BUP3
VCC3
AD5V
VCC3
ANTVCC
DET
SD
GND
PCE
PDO
PCK
PDI
GBUP
GYO
GSNS
SL
WE
POUT
SPD
TX
TXDD
RX
RXDD
GTC
CTG
GREV
RQ
GNDFM
BUP3
33V
AD5
CC3.3V
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

MOTHER TUNER UNIT
Consists of
RELAY PCB
MOTHER PCB
CONNECTOR PCB

L

3.22 MAIN UNIT, SW UNIT AND VOLUME UNIT


O VOLUME UNIT
N SW UNIT
M MAIN UNIT
Angle sense
VR3841
CCW1025
S3832
CSN1052
S3831
CSN1052
LIFT SW
ANGLE SW
M3001
CXB9515
Position motor
Horizon operation
M3002
CXB9516
Angle motor
Angle operation
CN3802
CN3803
CN3809
CN3807
CN3843
CN3842
CN3841
CN3833
CN3832
CN3831
(GRAY)
(YELLOW)
(RED)
(WHITE)
(BLUE)
LIFTSW (EJECT:L)
ANGLSW (Deg.0:L)
Motor driver
※ Note:It comes out lower about 1.5V than Vcc.
BA6247FP
IC3802
MTR1 Angle motor:H
MTR2 Position motor:H
MTRSEL : Position motor (in :H , out:L) Angle motor (down:H , up:L)
Position motor (← in) (out →)
Angle motor (←down) (up →)
Angle sense volume power supply switch
Q3804 UMD2N
Photo pulse driver
IC3804
TC7S14FU
Photo pulse output
IC3805
GP2L24B
Voltage adj.input
Regulator output
Regulator for driver
IC3801
BA00AST
9.5V=R3801+R3822=15.1KΩ
5V regulator for sense
IC3803
TA78L05F
D3801
UDZS5R6(B)
Q3801
DTC124EU
Q3802
2SA1037K
D3802
1SS355
Q3803
DTC124EU
CN3808
Short round (Open)
(High speed:L, Low speed:H)
CN3801
A 2/7 CN609
BUP
MGND
DGND
VDD
SENSES
LIFTSW
ANGLE0SW
MTRSEL
MTR1 (for ANGLE)
MTR2 (for ポジション)
MTRPW
MTRS
LIFTPUL
ANGLEIN

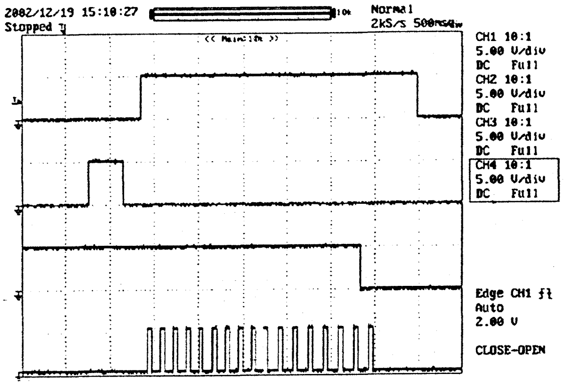
M N O

● Waveforms

The encircled number denote measuring pointes in the circuit diagram.

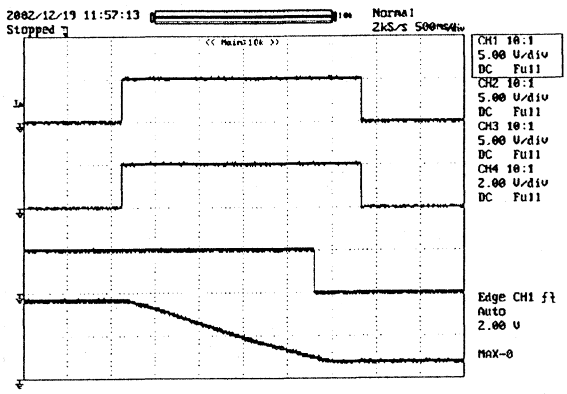
- CLOSE -> OPEN

① CH1:MTR2　② CH2:MTRSEL
③ CH3:LIFTSW　④ CH4:LFTPLS


2002/12/19 15:10:27
Stopped
Normal
2kS/s 500ms/div
CH1 10:1 5.00 V/div DC Full
CH2 10:1 5.00 V/div DC Full
CH3 10:1 5.00 V/div DC Full
CH4 10:1 5.00 V/div DC Full
Edge CH1 ⨍
Auto
2.00 V
CLOSE-OPEN

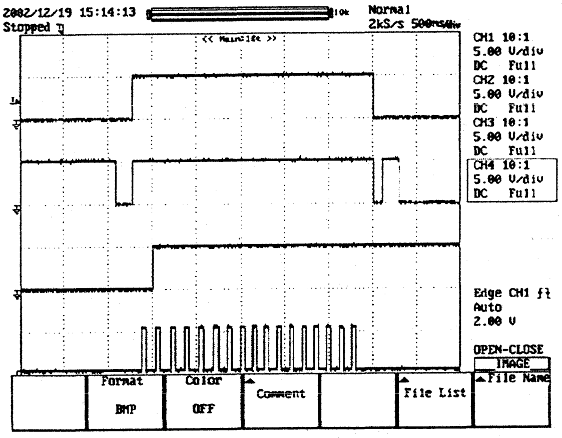
- MAX -> Deg.0 DOWN

⑤ CH1:MTR1　② CH2:MTRSEL
⑥ CH3:ANGLSW　⑦ CH4:ANGLIN


2002/12/19 11:57:13
Stopped
Normal
2kS/s 500ms/div
CH1 10:1 5.00 V/div DC Full
CH2 10:1 5.00 V/div DC Full
CH3 10:1 5.00 V/div DC Full
CH4 10:1 2.00 V/div DC Full
Edge CH1 ⨍
Auto
2.00 V
MAX-0

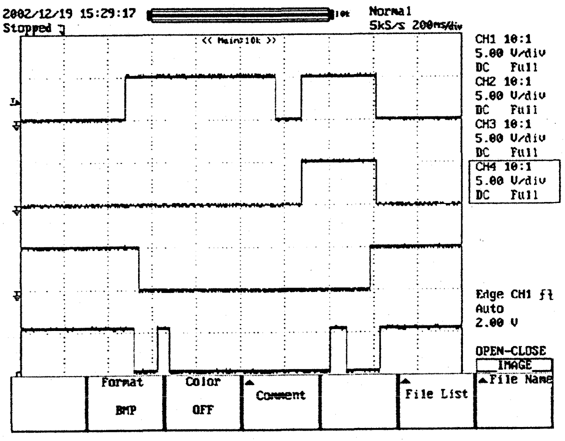
- OPEN -> CLOSE

① CH1:MTR2　② CH2:MTRSEL
③ CH3:LIFTSW　④ CH4:LFTPLS


2002/12/19 15:14:13
Stopped
Normal
2kS/s 500ms/div
CH1 10:1 5.00 V/div DC Full
CH2 10:1 5.00 V/div DC Full
CH3 10:1 5.00 V/div DC Full
CH4 10:1 5.00 V/div DC Full
Edge CH1 ⨍
Auto
2.00 V
OPEN-CLOSE

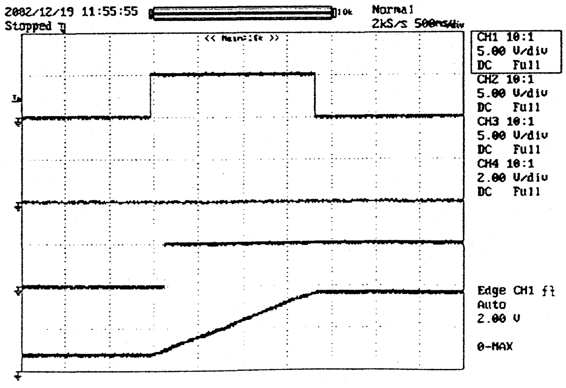
- Set back open -> Set

① CH1:MTR2　⑧ CH2:MTRS
③ CH3:LIFTSW　④ CH4:LFTPLS

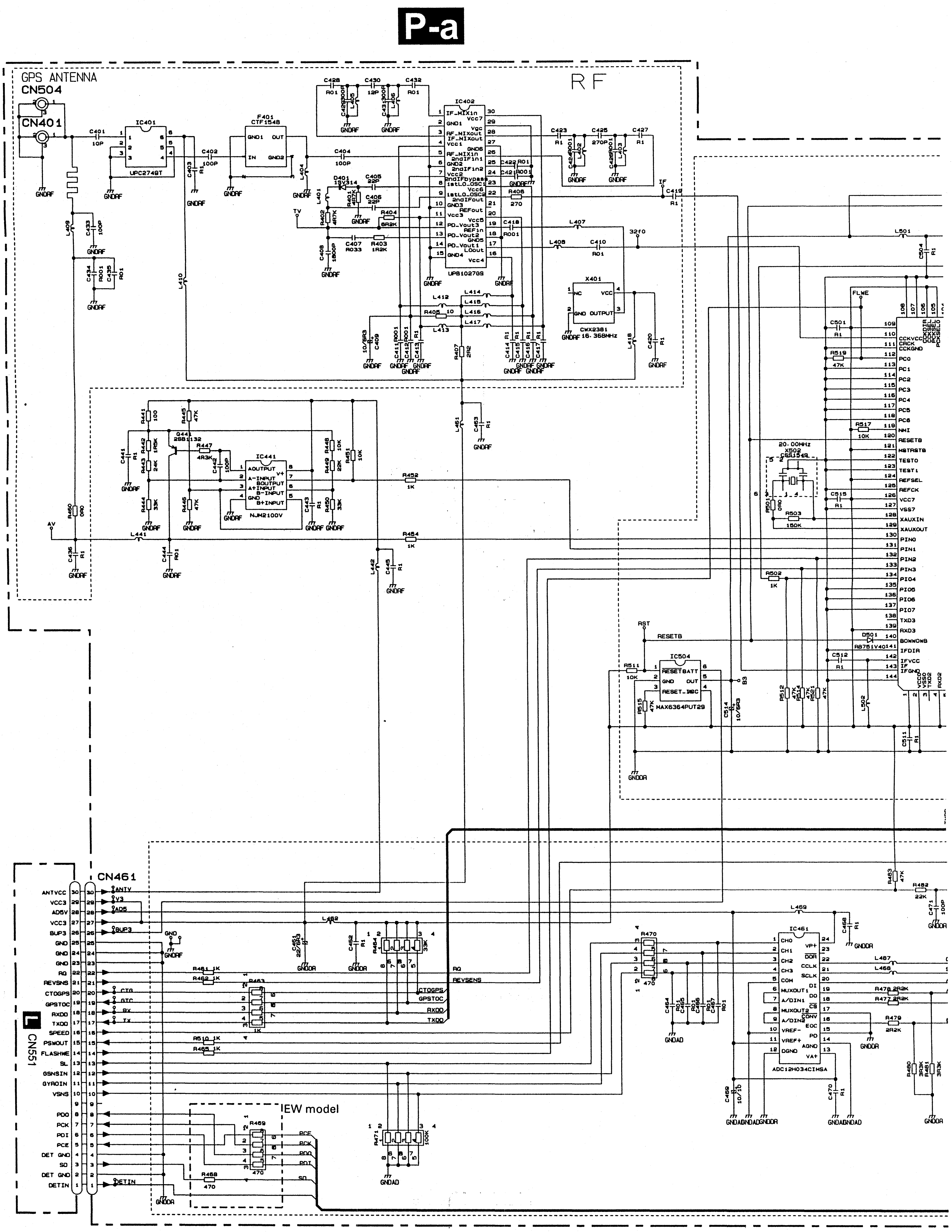

2002/12/19 15:29:17
Stopped
Normal
5kS/s 200ms/div
CH1 10:1 5.00 V/div DC Full
CH2 10:1 5.00 V/div DC Full
CH3 10:1 5.00 V/div DC Full
CH4 10:1 5.00 V/div DC Full
Edge CH1 ⨍
Auto
2.00 V
OPEN-CLOSE

- 0->MAX

⑤ CH1:MTR1　② CH2:MTRSEL
⑥ CH3:ANGLSW　⑦ CH4:ANGLIN

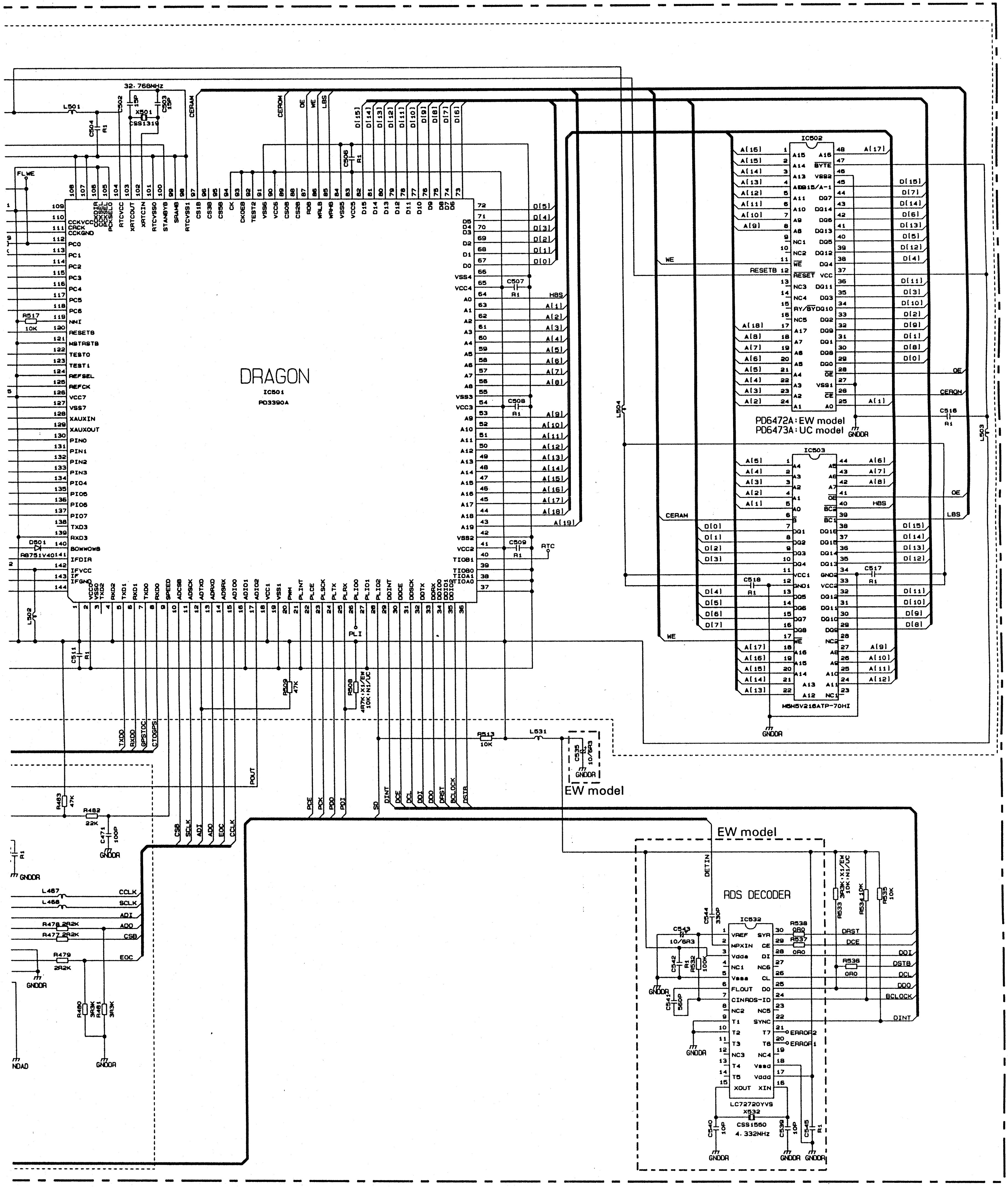

2002/12/19 11:55:55
Stopped
Normal
2kS/s 500ms/div
CH1 10:1 5.00 V/div DC Full
CH2 10:1 5.00 V/div DC Full
CH3 10:1 5.00 V/div DC Full
CH4 10:1 2.00 V/div DC Full
Edge CH1 ⨍
Auto
2.00 V
0-MAX

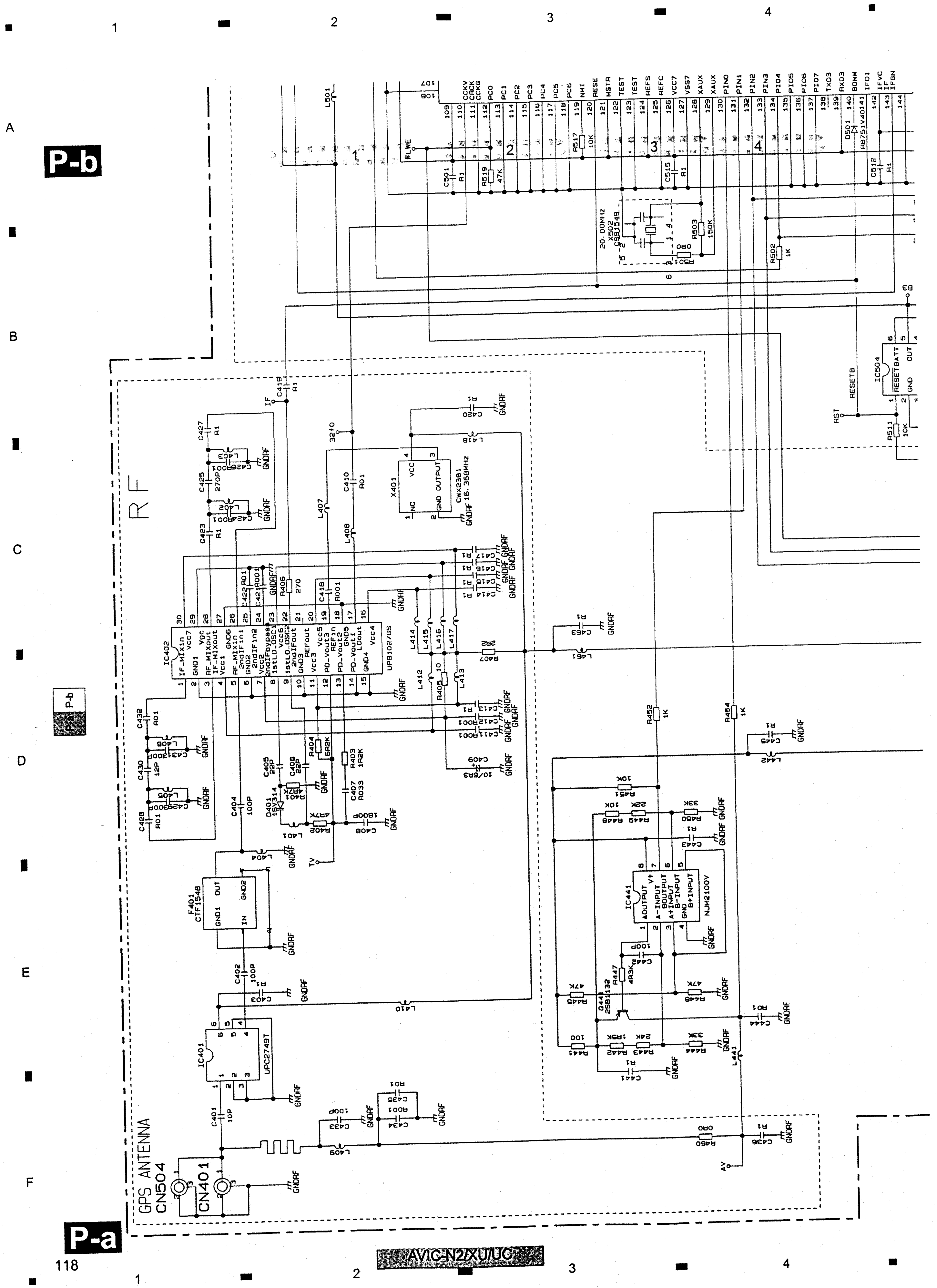
3.23 GPS UNIT(GUIDE PAGE)


P-a
GPS ANTENNA
CN504
CN401
RF
IC401
UPC2749T
C401 10P
C402 100P
F401 CTF1548
GND1 OUT
IN GND2
C403 R1
C404 100P
L404
C428 R01
C430 12P
C432 R01
C429 300P
C431 300P
L405
L406
D401 1SV314
C405 22P
C406 22P
R401 4R7K
R402 4R7K
L401
TV
R404 6R2K
C407 R033
R403 1R2K
C408 1500P
IC402
UPB1027GS
IF_MIXin
GND1
RF_MIXout
Vcc1
RF_MIXin
GND2
Vcc2
2ndIFbypass
1stLO_OSC1
GND3
Vcc3
PD_Vout3
PD_Vout2
PD_Vout1
GND4
Vcc7
VGC
IF_MIXout
GND6
2ndIFin1
2ndIFin2
1stLO_OSC2
Vcc6
2ndIFout
REFout
Vcc5
REFin
GND5
LOout
Vcc4
C423 R1
C425 270P
C427 R1
C424 R001
C426 R001
L402
L403
C422 R01
C421 R001
R406 270
C418 R001
C419 R1
IF
L407
32f0
L408
C410 R01
X401
CWX2381 16.368MHz
NC VCC
GND OUTPUT
L409
C433 100P
C434 R001
C435 R01
L410
L412
L413
L414
L415
L416
L417
R405 10
C409 10/6R3
C411 R001
C412 R001
C413 R1
C414 R1
C415 R1
C416 R1
C417 R1
R407 2R2
L418
C420 R1
GNDRF
L451
C453 R1
R441 100
R445 47K
Q441 2SB1132
R442 1R5K
R443 24K
R444 33K
R446 47K
R447 4R3K
C441 R1
C442 100P
IC441
NJM2100V
AOUTPUT V+
A-INPUT BOUTPUT
A+INPUT B-INPUT
GND B+INPUT
R448 10K
R449 22K
R450 33K
R451 10K
C443 R1
R452 1K
R454 1K
R460 0R0
AV
L441
C436 R1
C444 R01
L442
C445 R1
L501
C504 R1
FLWE
C501 R1
R519 47K
R517 10K
20.00MHz X502 CSS1549
R501 0R0
R503 150K
C515 R1
R502 1K
RST
RESETB
IC504
MAX6364PUT29
RESETBATT
GND OUT
RESET_IN VCC
R511 10K
R515 47K
C514 10/6R3
B3
R512 47K
R514 47K
R521 47K
47K
L502
C511 R1
D501 RB751V40
C512 R1
CCKVCC CRCK CCKGND
PC0 PC1 PC2 PC3 PC4 PC5 PC6
NMI
RESETB
MBTRSTB
TEST0
TEST1
REFSEL
REFCK
VCC7
VSS7
XAUXIN
XAUXOUT
PIN0 PIN1 PIN2 PIN3
PIO4 PIO5 PIO6 PIO7
TXD3
RXD3
BOWWOWB
IFDIR
IFVCC
IF
IFGND
CN461
CN551
ANTVCC
VCC3
AD5V
VCC3
BUP3
GND
GND
GND
RG
REVSNS
CTGPS
GPSTOC
RXD0
TXD0
SPEED
PSWOUT
FLASHWE
SL
GSNSIN
GYROIN
VSNS
PDO
PCK
PDI
PCE
DET GND
SD
DET GND
DETIN
ANTV
V3
AD5
BUP3
CTG
GTC
Rx
Tx
L462
C451 22/6R3
C452 R1
R464 33K
R461 1K
R462 1K
R463 1K
R510 1K
R465 1K
RG
REVSENS
CTGPS
GPSTOC
RXD0
TXD0
IEW model
R469 470
R468 470
PCE
PCK
PDO
PDI
SD
DETIN
R471 100K
R470 470
IC461
ADC12H034CIMSA
CH0 CH1 CH2 CH3 COM
MUXOUT1 A/DIN1 MUXOUT2 A/DIN2
VREF- VREF+ DGND
VP+ DOR CCLK SCLK DI DO CS CONV EOC PD AGND VA+
L469
C468 R1
C464 R01
C465 R01
C466 R01
C467 R01
C469 10/10
C470 R1
L467
L468
R478 2R2K
R477 2R2K
R479 2R2K
R480 3R3K
R481 3R3K
R483 47K
R482 22K
C471 100P
GNDAD
GNDDR
GNDDA
L

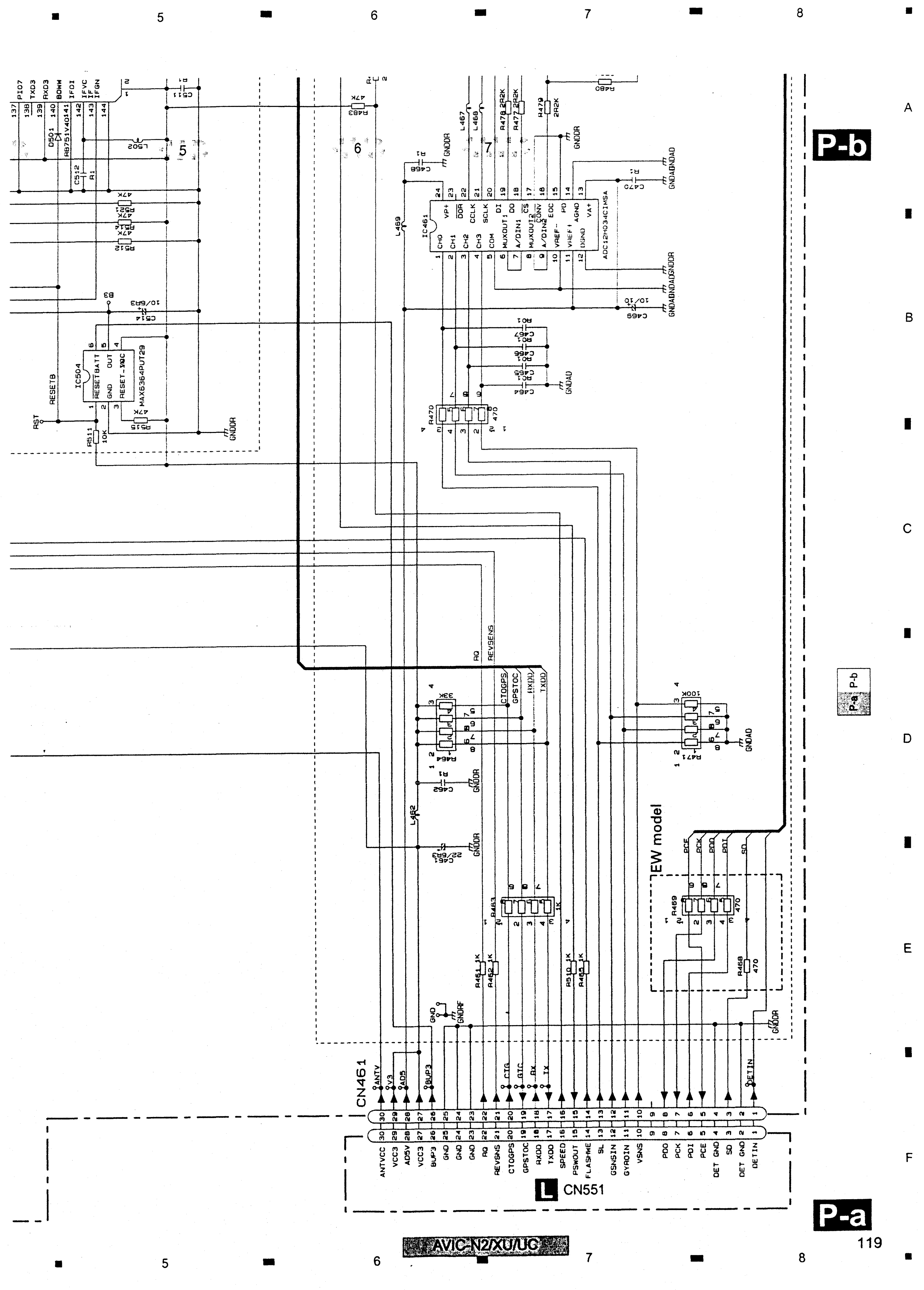
P-b

P GPS UNIT


DRAGON
IC501
PD3390A
32.768MHz
X501
CSS1310
L501
C502
C503
C504
C506
C507
C508
C509
C511
R517
10K
D501
RB751V40
L502
L504
L503
IC502
PD6472A: EW model
PD6473A: UC model
IC503
M5M5V216ATP-70HI
GNDDR
CERAM
CEROM
OE
WE
LBS
HBS
RTC
PLI
R509
47K
R508
4R7K: X1/EW
10K: N1/UC
R513
10K
L531
C535
10/6R3
EW model
RDS DECODER
IC532
LC72720YVS
X532
CSS1550
4.332MHz
C540
10P
C539
10P
C541
560P
C542
C543
10/6R3
C544
330P
C545
R532
100K
R533
3R3K: X1/EW
10K: N1/UC
R534
10K
R535
10K
R536
0R0
R537
0R0
R538
0R0
DETIN
DRST
DCE
DDI
DSTB
DCL
DDO
BCLOCK
DINT
TXDO
RXDO
GPSTOC
CTOGPS
POUT
CSB
SCLK
ADI
ADO
EOC
CCLK
PCE
PCK
PDO
PDI
SO
R463
47K
R482
22K
C471
100P
L467
L468
R476 2R2K
R477 2R2K
R479
2R2K
R480
3R3K
R481
3R3K
FLWE

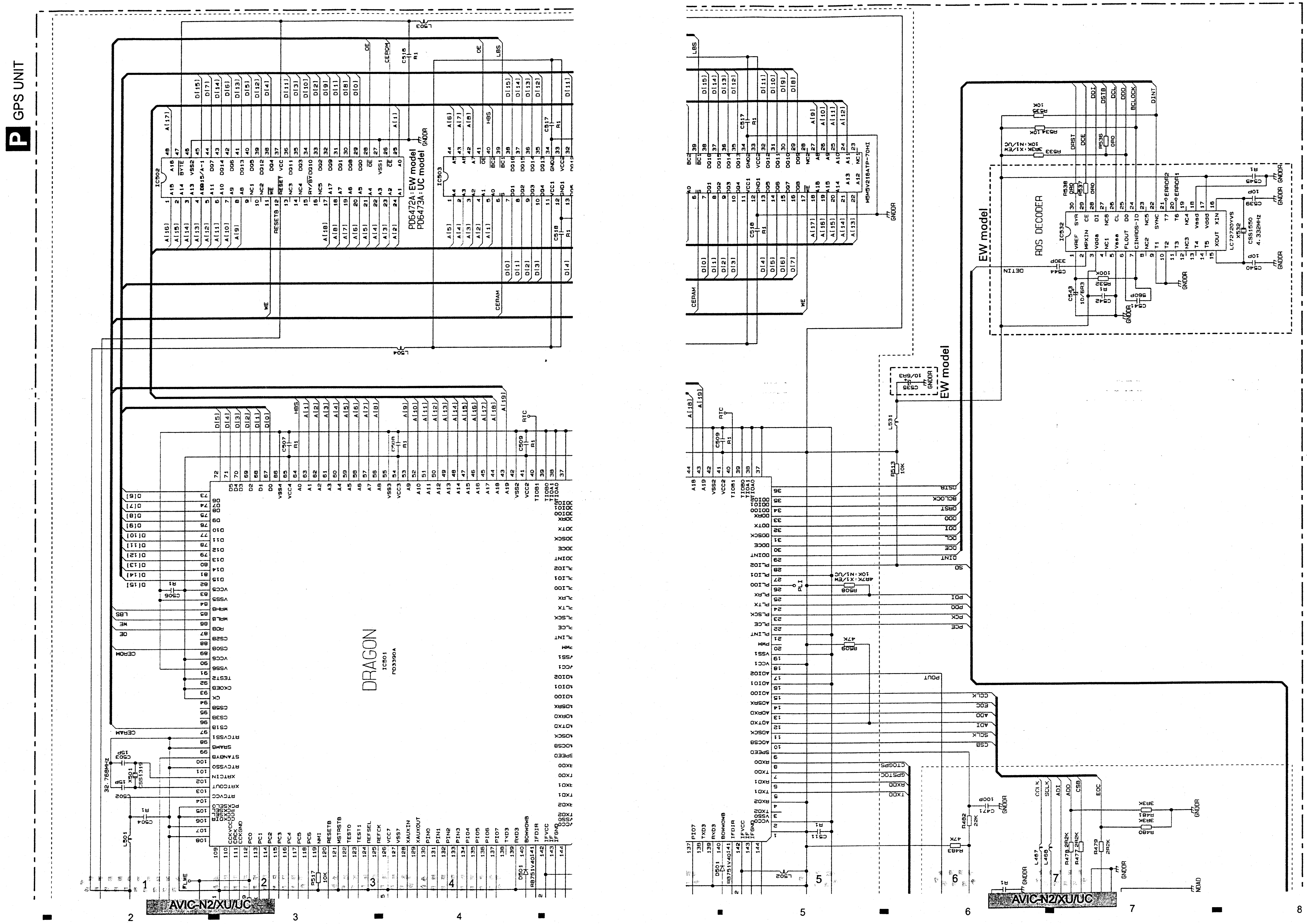


P-b
P-a
RF
IC402
UPB1027GS
IC401
UPC2749T
F401
CTF1548
X401
CHX3381
16.368MHz
IC441
NJM2100V
Q441
2SB1132
GPS ANTENNA
CN504
CN401
IC504
RESETBATT
RESETB
RST
20.00MHz
PIN0
PIN1
PIN2
PIN3
PIO4
PIO5
PIO6
PIO7
TXD3
RXD3
BOWW
IFVC
IFGN
PC0
PC1
PC2
PC3
PC4
PC5
PC6
NMI
RESE
MSTA
TEST
REFS
REFC
VCC7
VSS7
XAUX
D501
RB751V40



P-b
P-a
IC461
ADC12H034CIMSA
IC504
MAX6364PUT29
RESETB
RST
IEW model
CN461
CN551
ANTVCC
VCC3
AD5V
BUP3
GND
RG
REVSNS
CTOGPS
GPSTOC
RXDD
TXDD
SPEED
PSWOUT
FLASHWE
BL
GSNSIN
GYROIN
VSNS
PDO
PCK
PDI
PCE
DET GND
SD
DETIN

P GPS UNIT

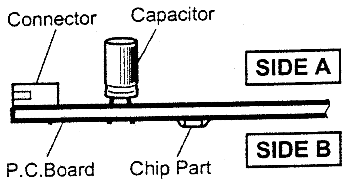

IC502
PD6472A: EW model
PD6473A: UC model
IC503
M5M5V216ATP-70HI
DRAGON
IC501
PD3390A
IC532
LC72720YVS
RDS DECODER
EW model
X532
CSS1550
4.332MHz
X501
CSS1319
32.768kHz
D501
RB751V40141
L501
L502
L503
L504
L531
C502
C503
C504
C506
C507
C508
C509
C516
C517
C518
C538
C539
C540
C541
C542
C543
C544
C471
R508
R509
R513
R517
R533
R534
R535
R536
R537
R538
R478
R479
R480
R481
R482
R483
GNDDR
DSTB
BCLOCK
DRST
DDO
DDI
DCL
DCE
DINT
POI
POO
PCK
PCE
POUT
CCLK
EDC
ADO
ADI
SCLK
CSB
CTSGPS
GPSTOC
RXDD
TXDD
CERAM
LBS
WE
OE
RTC
PLI
NDAD
A B C D E F
P-a P-b

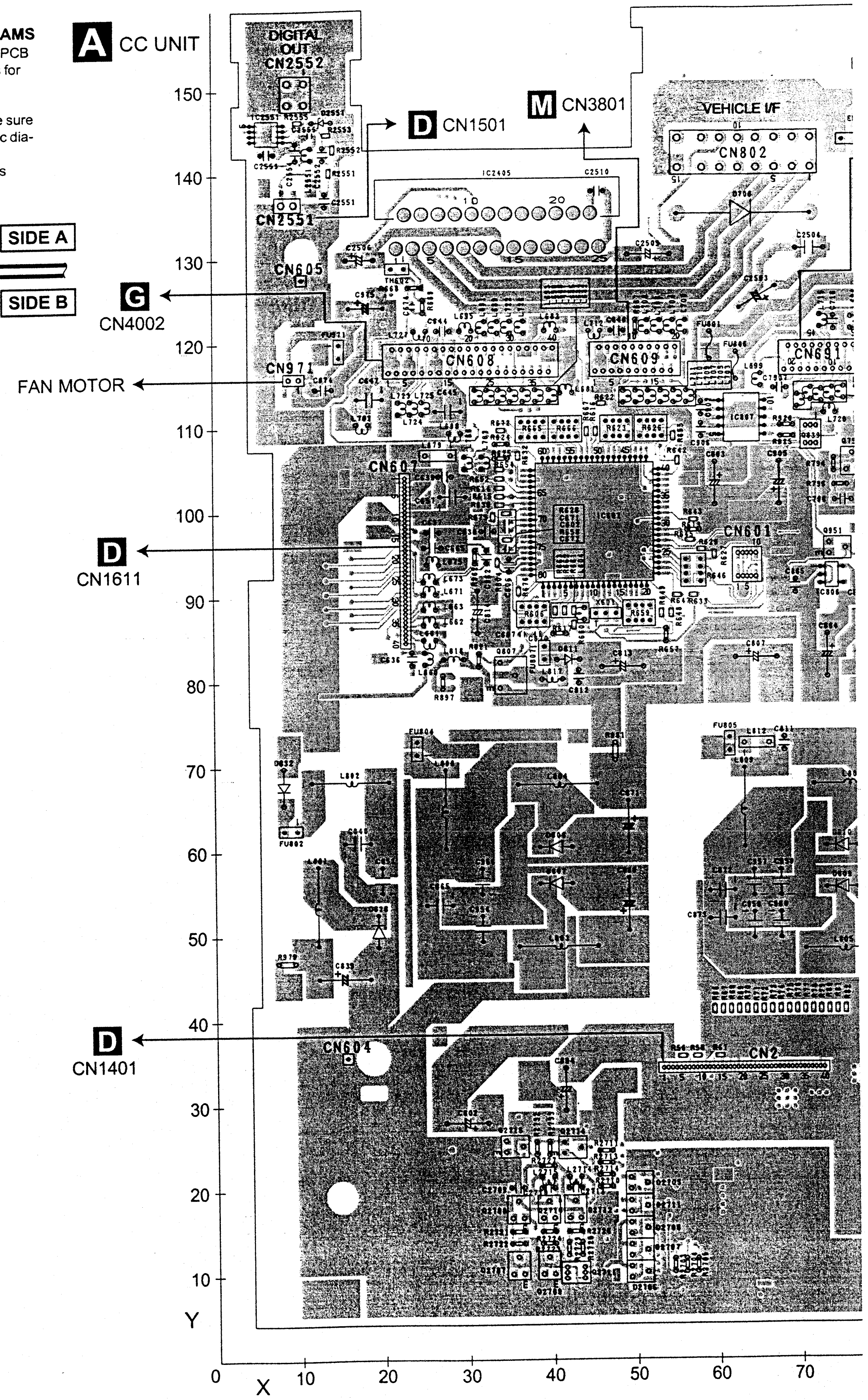
4. PCB CONNECTION DIAGRAM

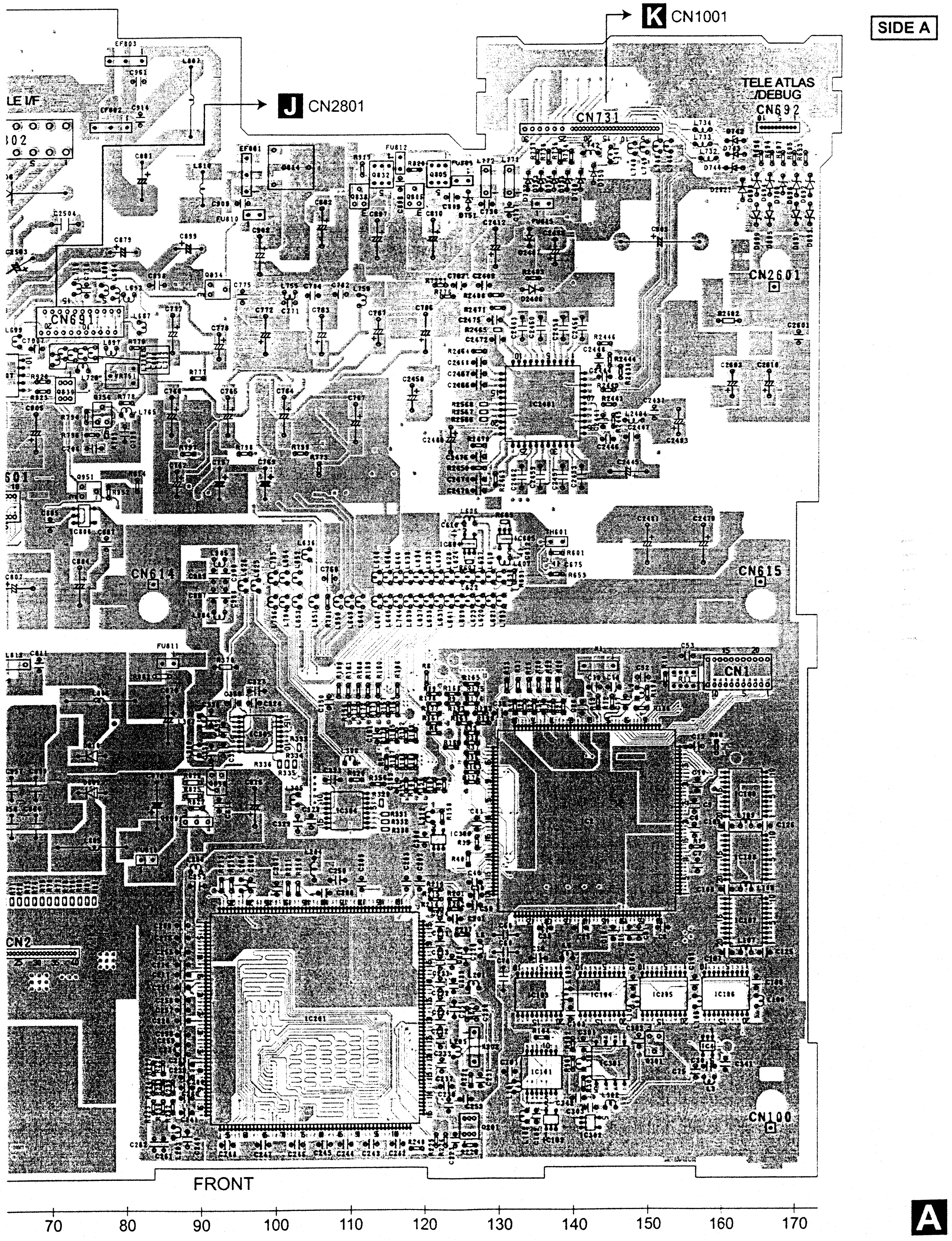
4.1 CC UNIT

NOTE FOR PCB DIAGRAMS

1. The parts mounted on this PCB include all necessary parts for several destination.
   For further information for respective destinations, be sure to check with the schematic diagram.
2. Viewpoint of PCB diagrams

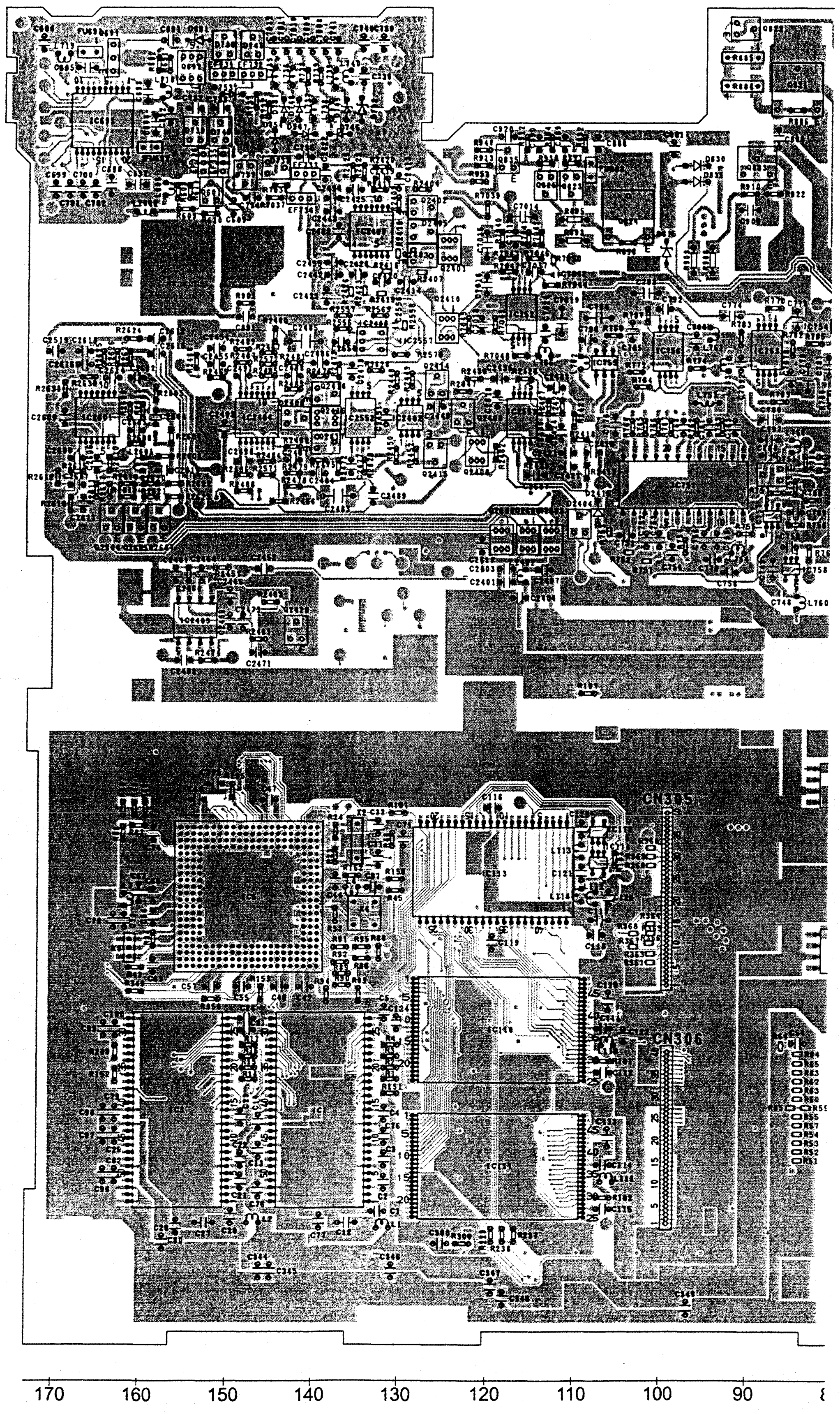

Connector
Capacitor
SIDE A
SIDE B
P.C.Board
Chip Part

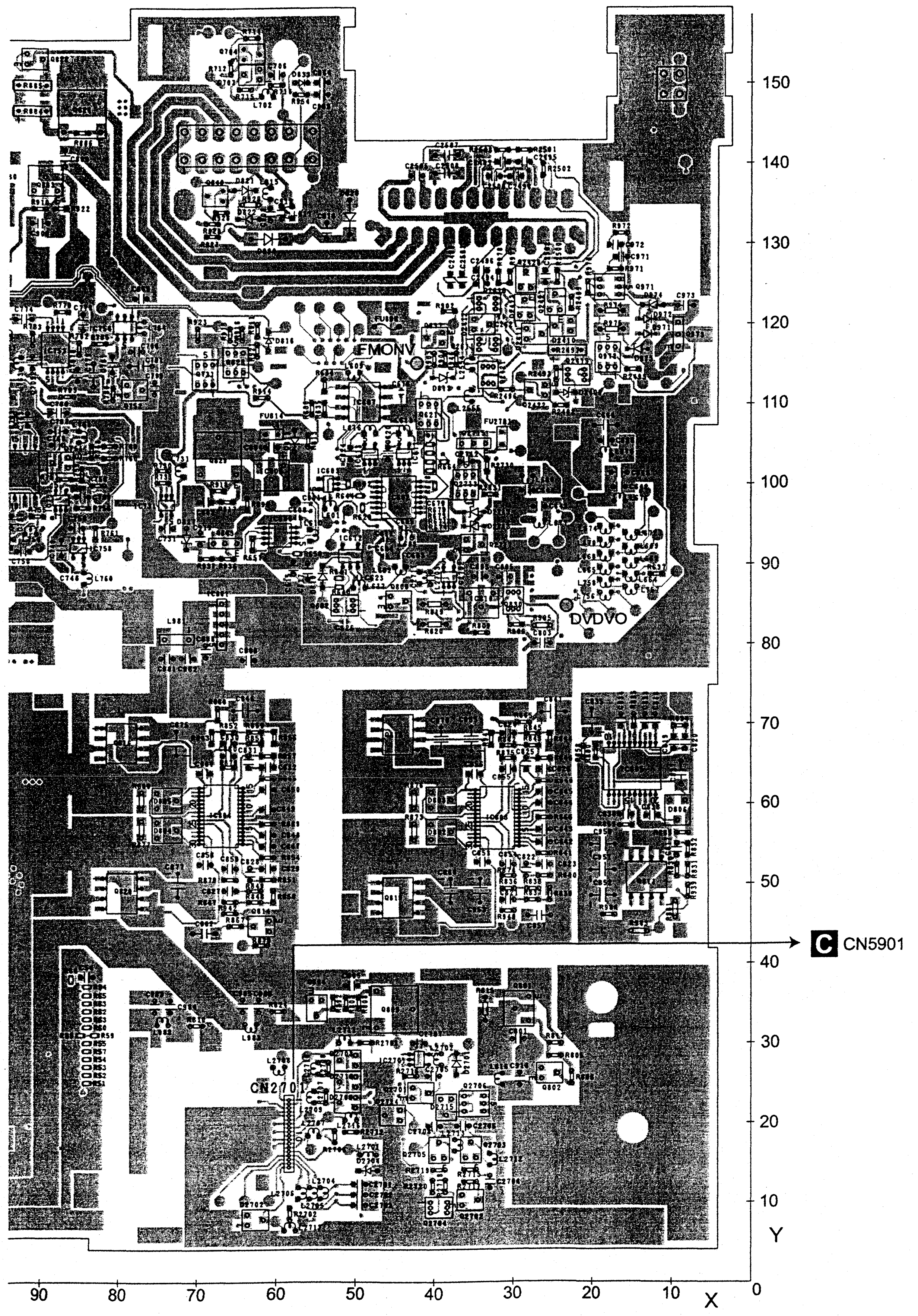

A CC UNIT
DIGITAL OUT
CN2552
CN2551
D CN1501
M CN3801
VEHICLE I/F
CN802
G CN4002
FAN MOTOR
CN971
CN605
CN608
CN609
CN691
CN607
CN601
D CN1611
D CN1401
CN604
CN2
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
Y
0
X
10
20
30
40
50
60
70


K CN1001
SIDE A
TELE ATLAS /DEBUG
CN692
CN731
J CN2801
LE I/F
CN691
CN2601
CN614
CN615
CN1
CN2
CN100
FRONT
70
80
90
100
110
120
130
140
150
160
170

A CC UNIT

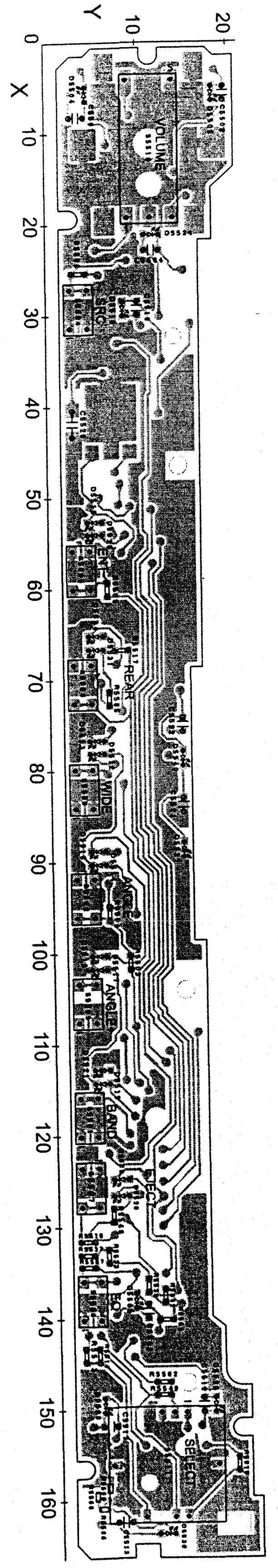
SIDE B


CN305
CN306
170
160
150
140
130
120
110
100
90

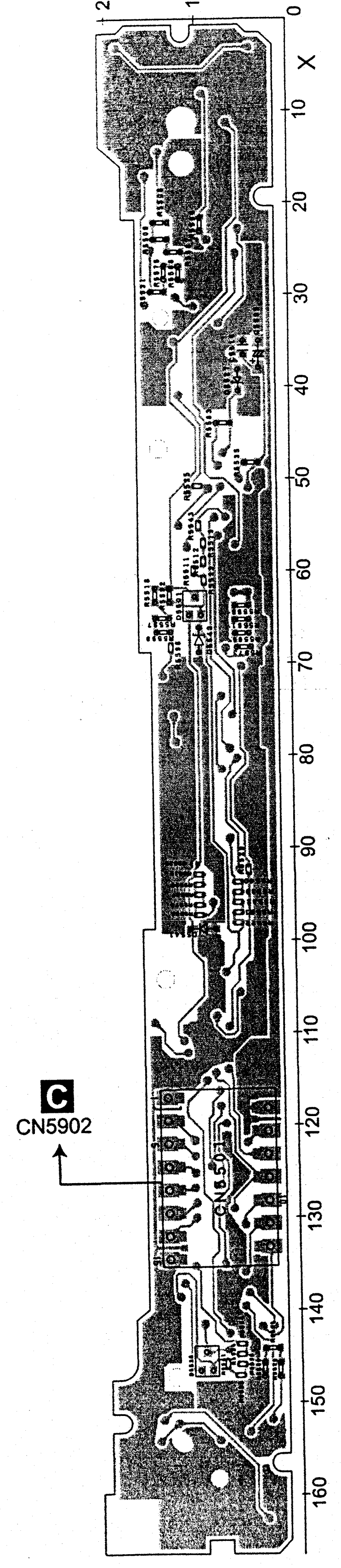

EMONV
DVDVO
CN2701
C CN5901
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
Y
0
X

4.2 KEYBOARD PCB

B KEYBOARD PCB **SIDE A**

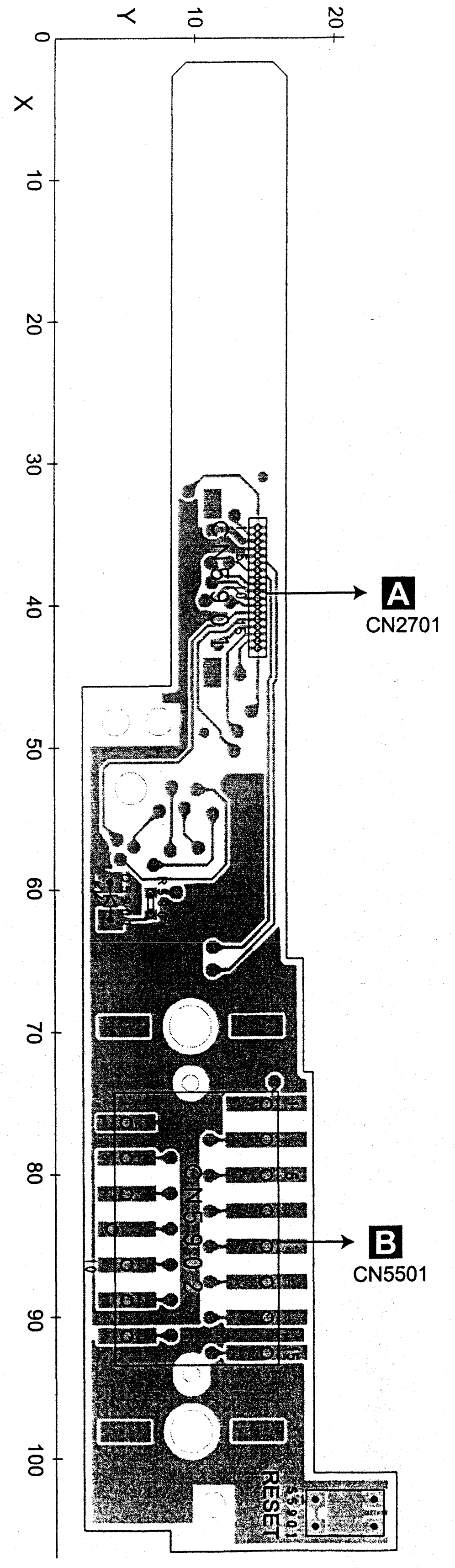

Y
X
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
VOLUME
SPEED

B KEYBOARD PCB **SIDE B**

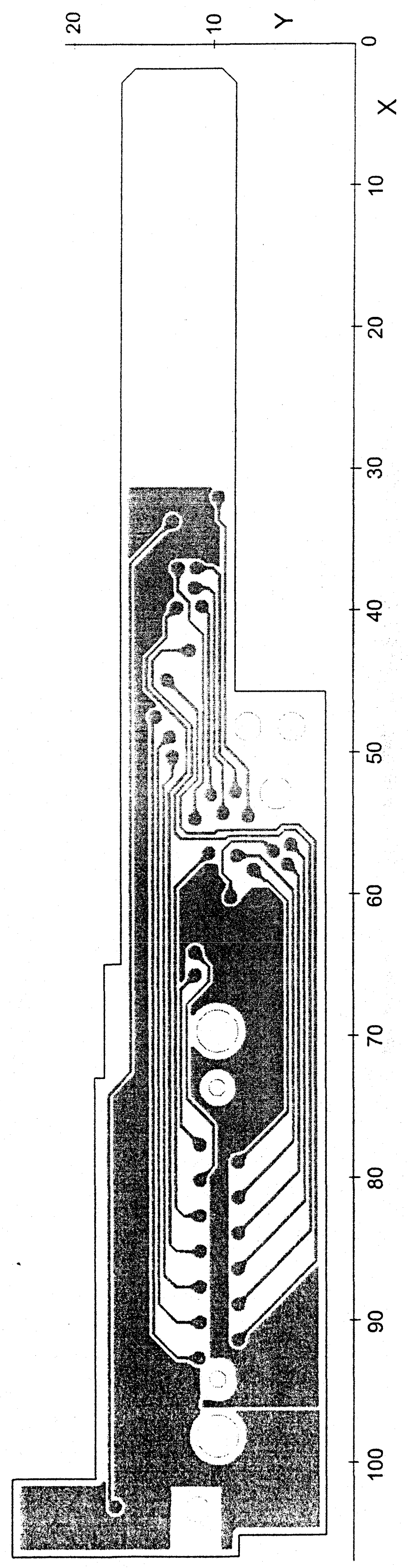

Y
X
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
C
CN5902

4.3 PANEL PCB

C PANEL PCB **SIDE A**

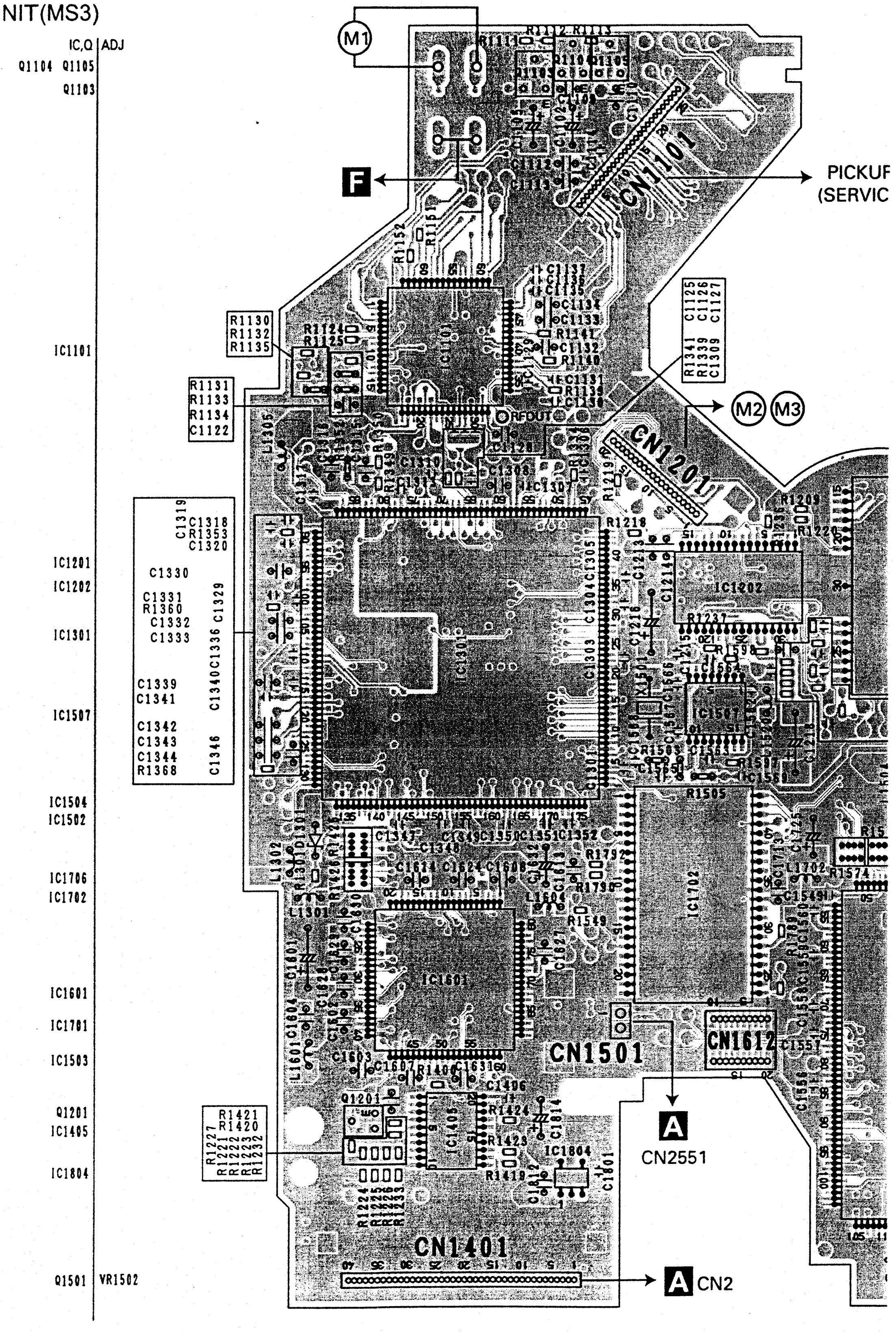

Y
X
0
10
20
30
40
50
60
70
80
90
100
A
CN2701
B
CN5501
RESET

C PANEL PCB **SIDE B**

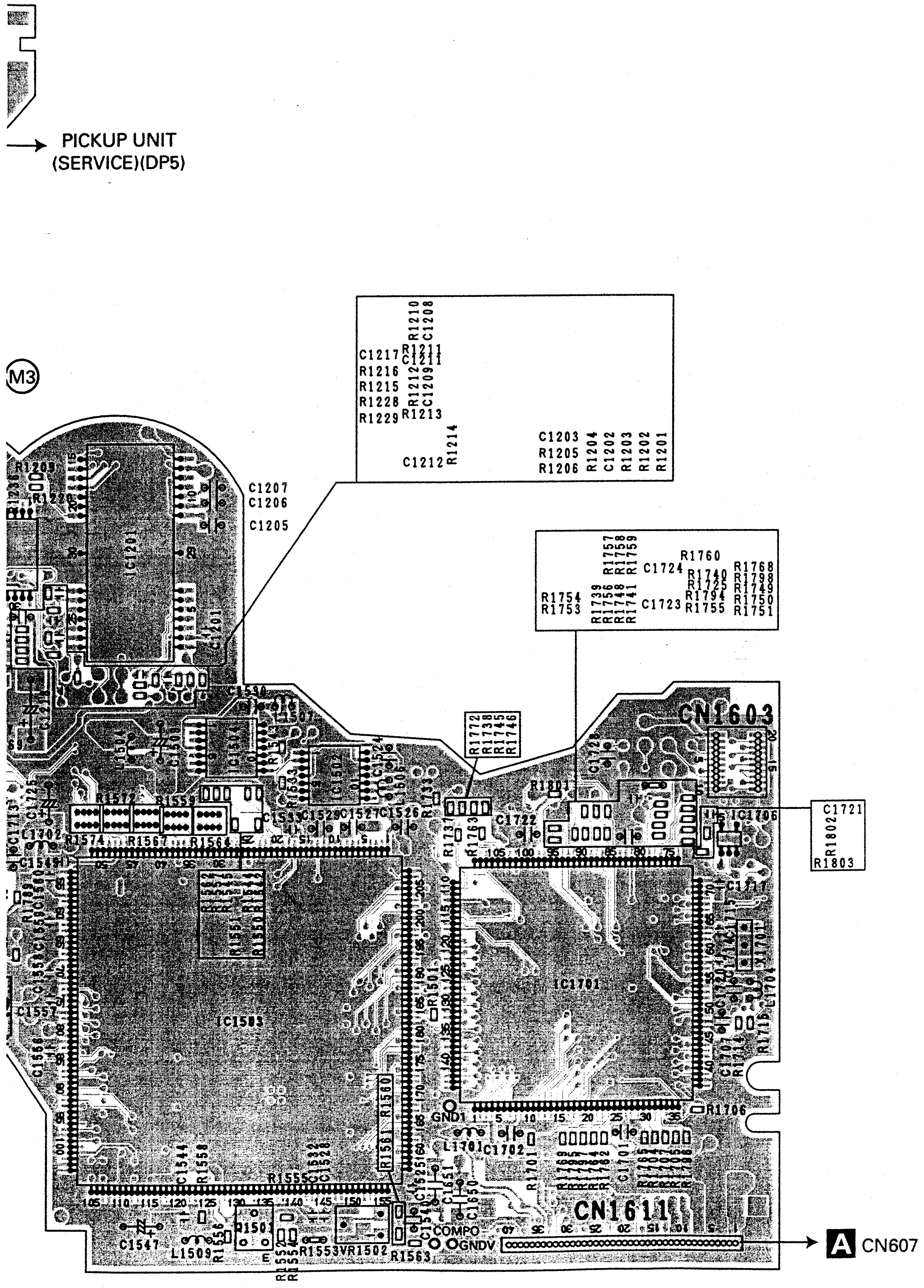

Y
X
0
10
20
30
40
50
60
70
80
90
100

4.4 DVD CORE UNIT(MS3)

D DVD CORE UNIT(MS3)


IC,Q
ADJ
Q1104 Q1105
Q1103
IC1101
IC1201
IC1202
IC1301
IC1507
IC1504
IC1502
IC1706
IC1702
IC1601
IC1701
IC1503
Q1201
IC1405
IC1804
Q1501
VR1502
M1
F
PICKUP
(SERVIC
CN1101
R1130
R1132
R1135
R1131
R1133
R1134
C1122
R1341
R1339
C1309
C1125
C1126
C1127
M2
M3
CN1201
RFOUT
C1319
C1318
R1353
C1320
C1330
C1331
R1360
C1332
C1333
C1329
C1336
C1339
C1341
C1340
C1342
C1343
C1344
R1368
C1346
IC1202
IC1301
IC1507
IC1702
IC1601
IC1405
IC1804
CN1501
CN1612
A
CN2551
R1421
R1420
R1227
R1222
R1223
R1232
CN1401
A
CN2

SIDE A


PICKUP UNIT
(SERVICE)(DP5)
M3
C1217
R1216
R1215
R1228
R1229
R1210
C1208
R1211
C1211
R1212
C1209
R1213
R1214
C1212
C1203
R1205
R1206
R1204
C1202
R1203
R1202
R1201
C1207
C1206
C1205
IC1201
R1757
R1758
R1759
R1760
C1724
R1740
R1725
R1794
R1755
R1768
R1798
R1749
R1750
R1751
R1754
R1753
R1739
R1756
R1748
R1741
C1723
R1772
R1738
R1745
R1746
CN1603
C1721
R1802
R1803
IC1706
IC1503
IC1701
R1706
GND1
COMPO
GNDV
VR1502
R1563
CN1611
A
CN607

A

D DVD CORE UNIT(MS3)

SIDE B

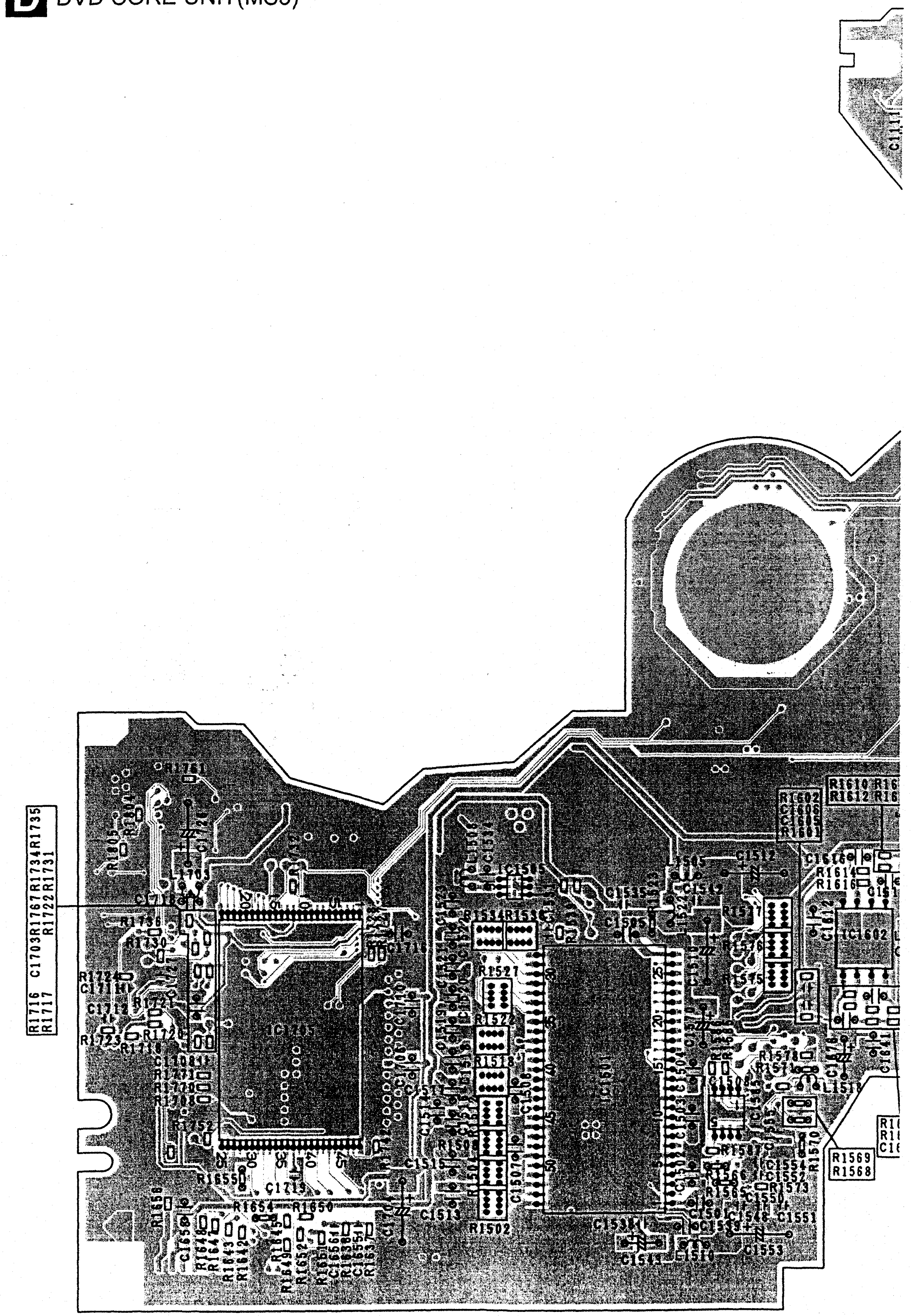
B

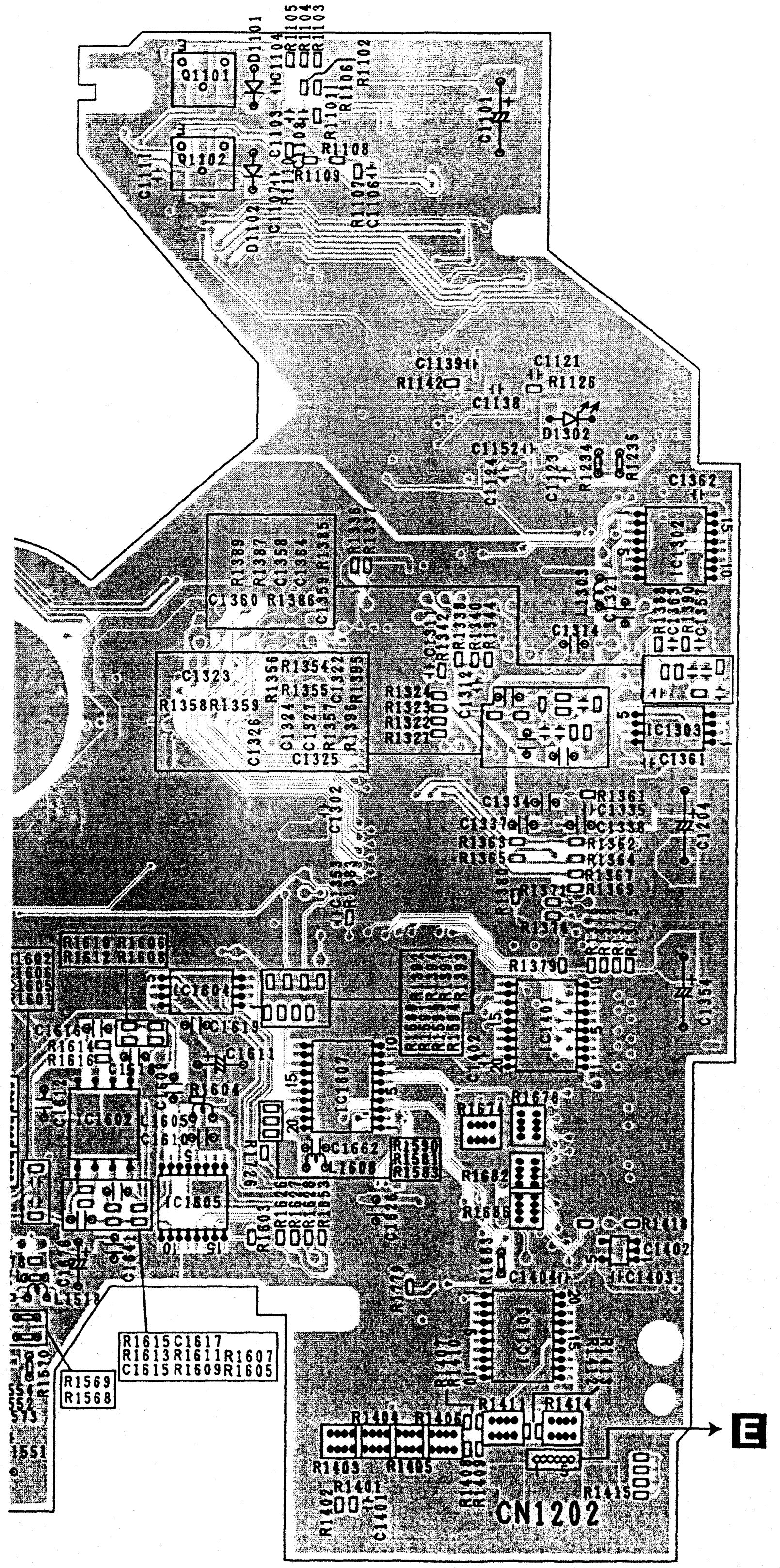
C

D

E

F



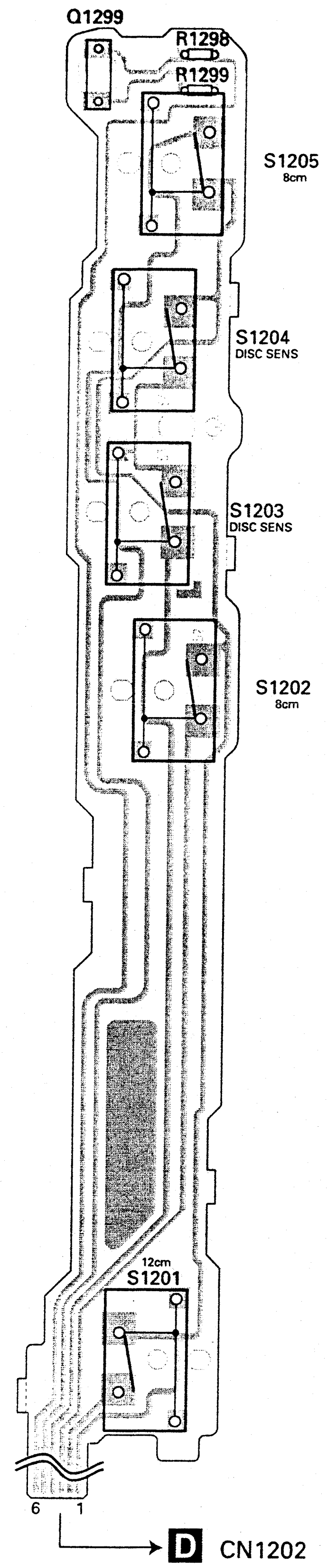


IC,Q

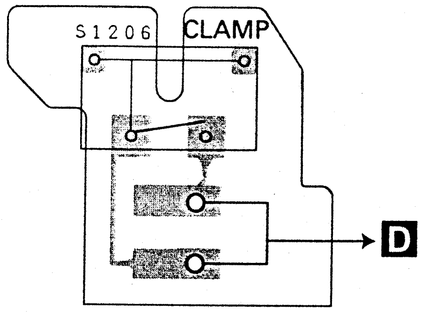
Q1101
Q1102
IC1302
IC1303
IC1604
IC1401
IC1505
IC1607
IC1602
IC1605
IC1705
IC1402
IC1501
IC1508
IC1403

4.5 COMPOUND UNIT(A) AND COMPOUND UNIT(B)

E COMPOUND UNIT(A)

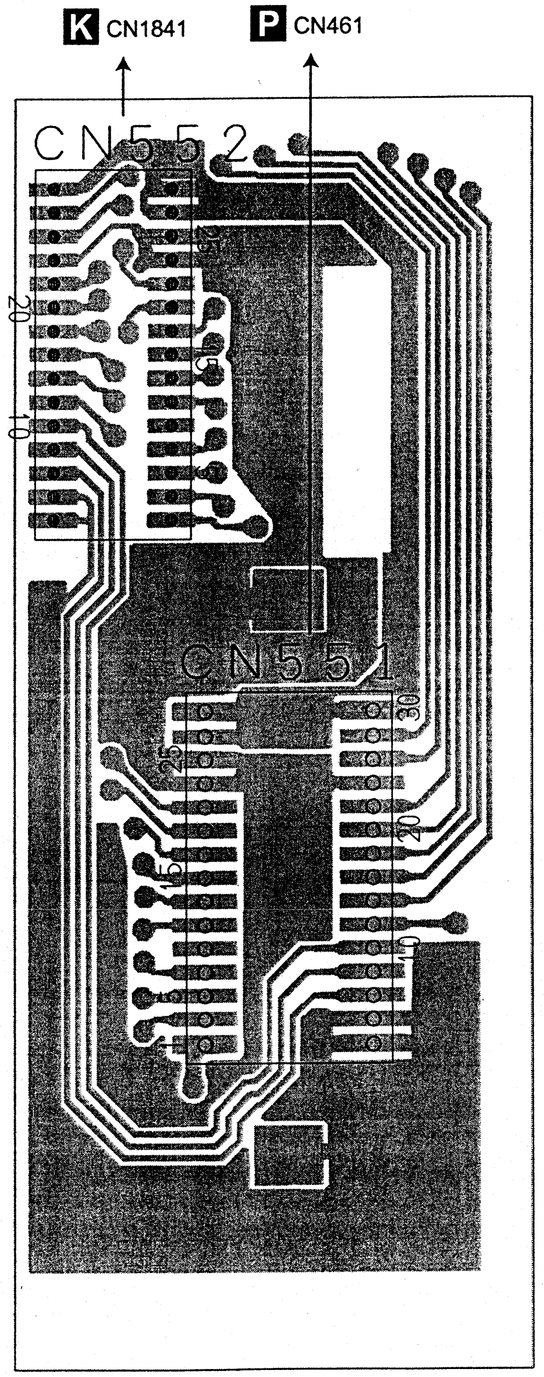

Q1299
R1298
R1299
S1205
8cm
S1204
DISC SENS
S1203
DISC SENS
S1202
8cm
12cm
S1201
6
1
D
CN1202

F COMPOUND UNIT(B)

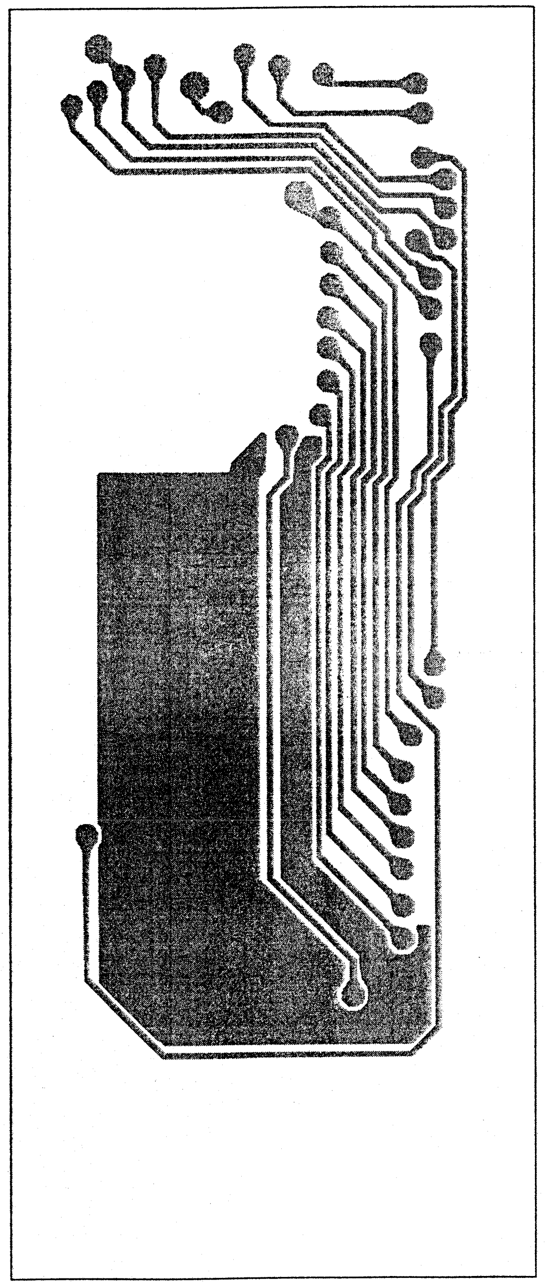

S1206
CLAMP
D

4.6 CONNECTOR PCB

L CONNECTOR PCB **SIDE A**

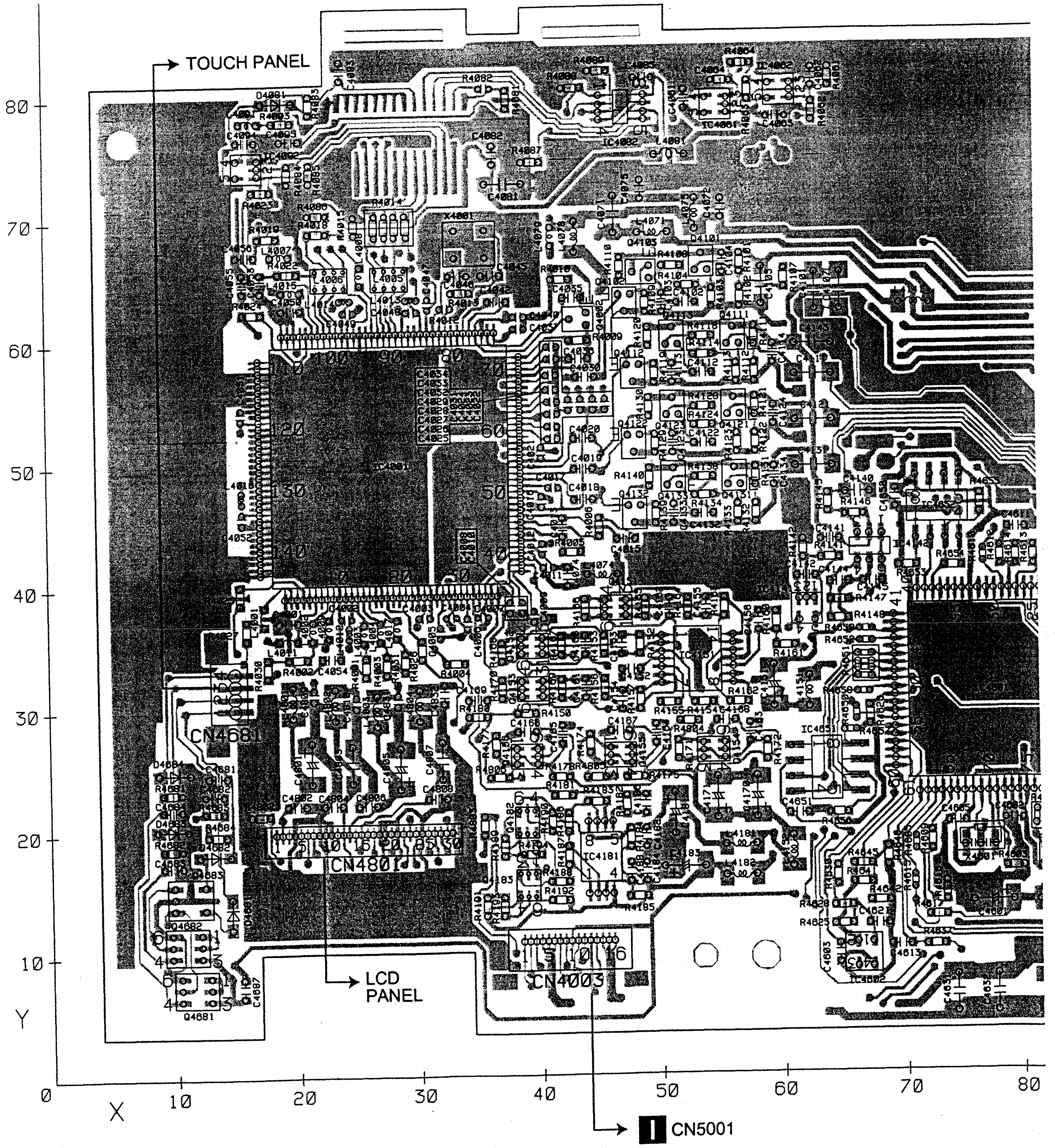

K CN1841
P CN461
CN552
20
10
CN551
30
25
20
15
10

L CONNECTOR PCB **SIDE B**

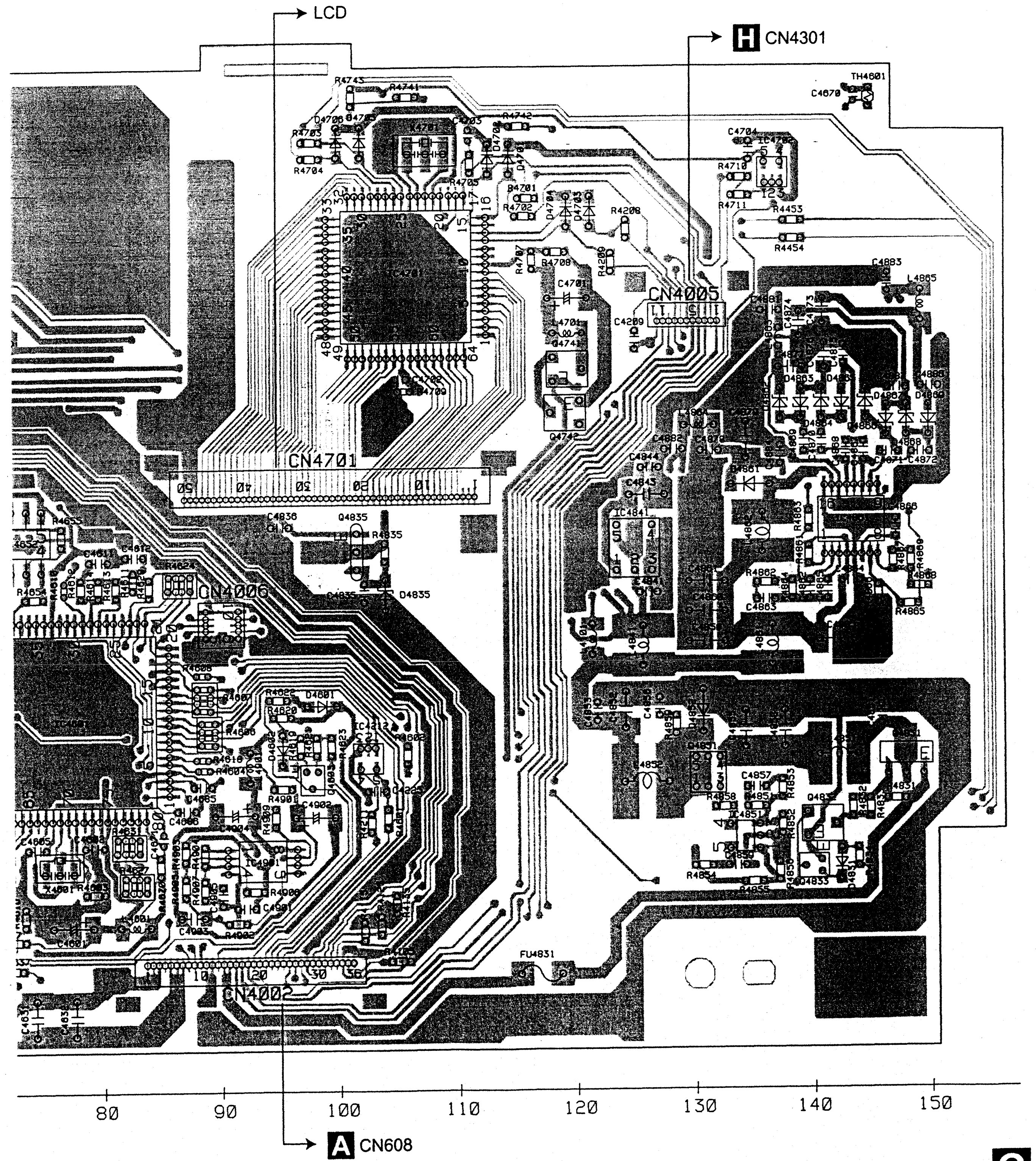


4.7 MONITOR PCB

G MONITOR PCB

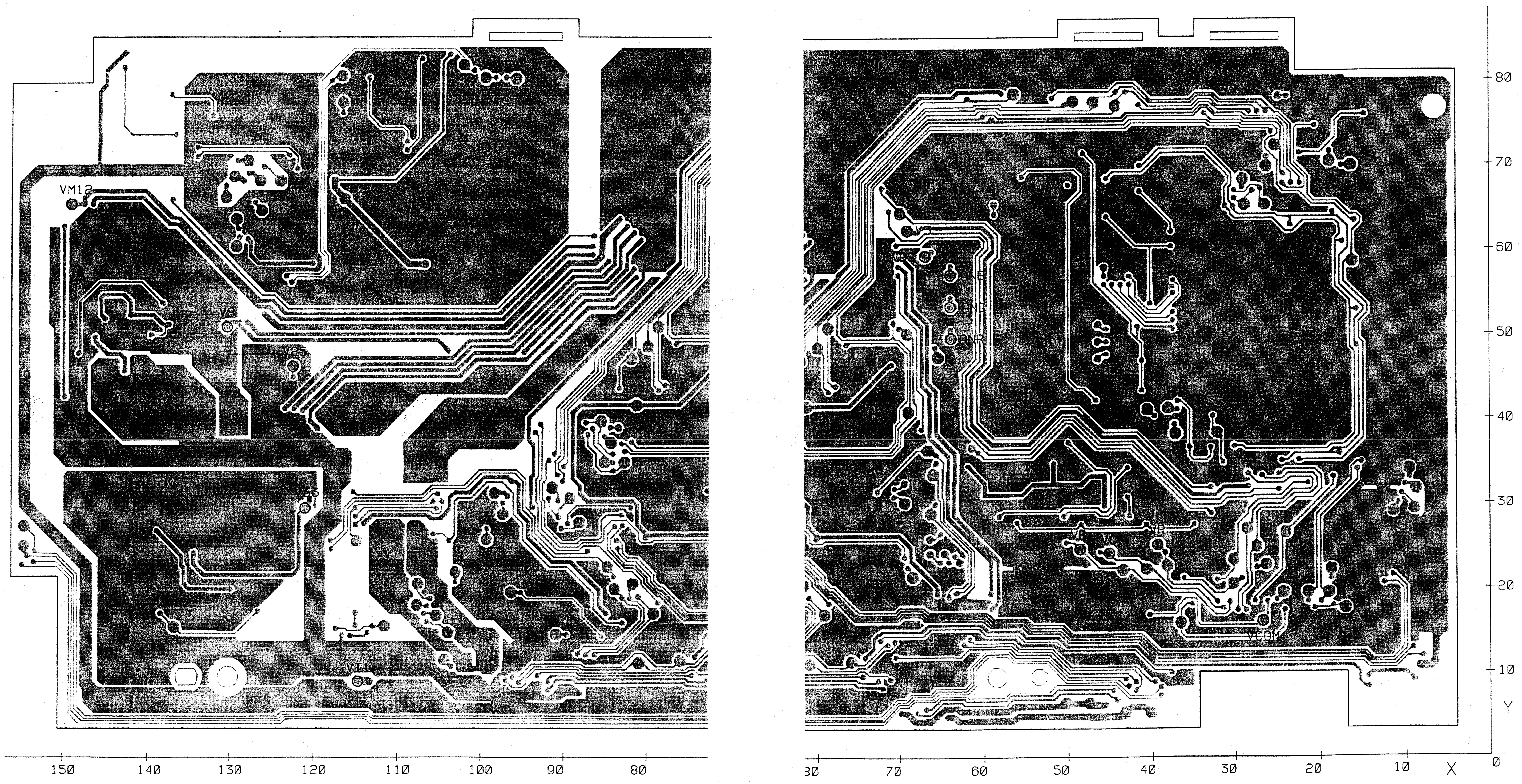

TOUCH PANEL
LCD PANEL
CN4801
CN4601
CN4003
I CN5001
80
70
60
50
40
30
20
10
Y
0
X
10
20
30
40
50
60
70
80

SIDE A


LCD
H CN4301
CN4701
CN4005
CN4006
CN4002
A CN608
80
90
100
110
120
130
140
150

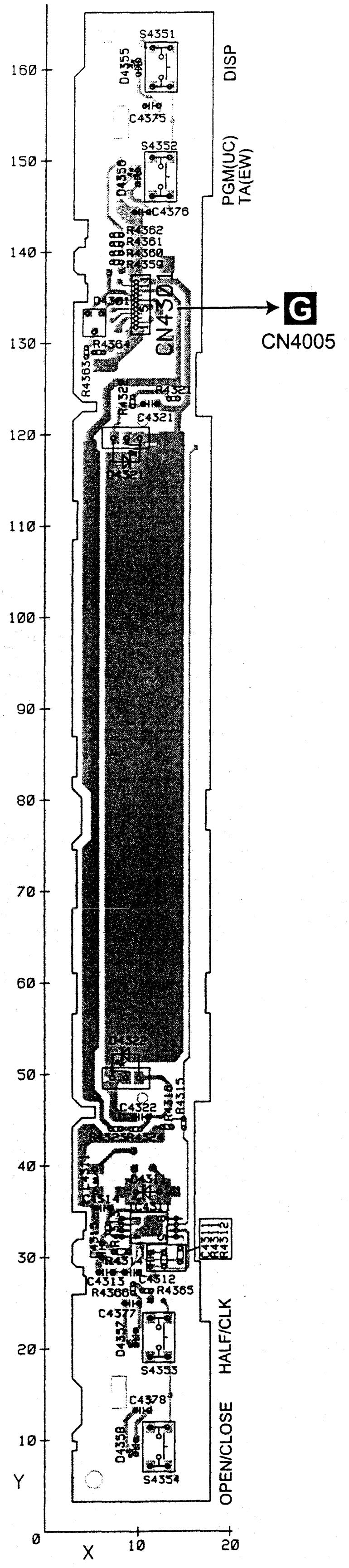
G MONITOR PCB

SIDE B

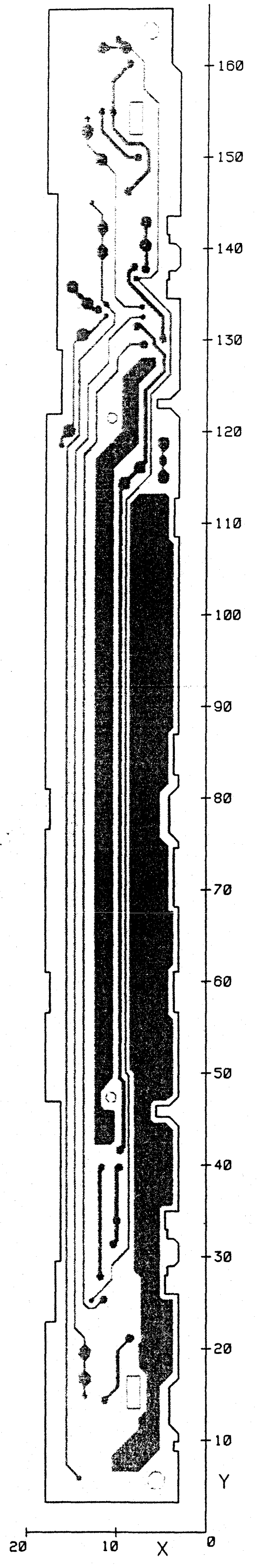

VM12
V8
V25
V33
V11
V18
V5
VMB
ANB
ANG
ANR
VB
VG
VR
VCOM
150
140
130
120
110
100
90
80
30
70
60
50
40
30
20
10
X
0
10
20
30
40
50
60
70
80
Y

4.8 UPPER PCB

H UPPER PCB **SIDE A**

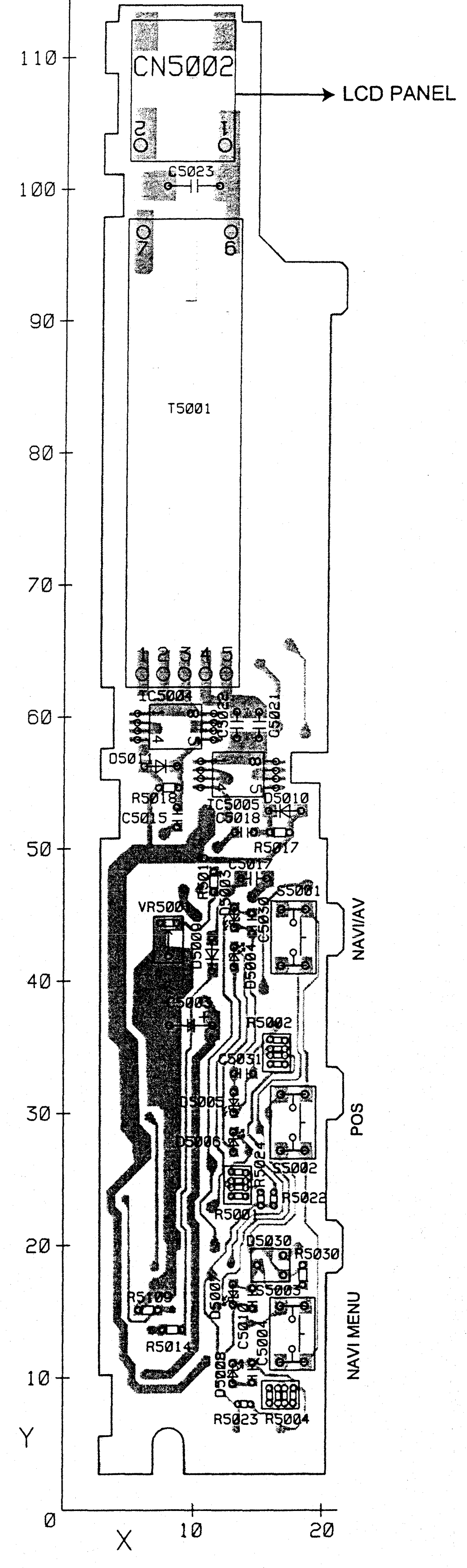

S4351
D4355
C4375
DISP
S4352
D4356
C4376
PGM(UC)
TA(EW)
R4362
R4361
R4360
R4359
D4361
CN4351
R4364
R4363
C4321
G
CN4005
C4322
C4313
R4366
R4365
C4512
C4377
D4357
S4353
HALF/CLK
C4378
D4358
S4354
OPEN/CLOSE
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
Y
X
10
20

H UPPER PCB **SIDE B**

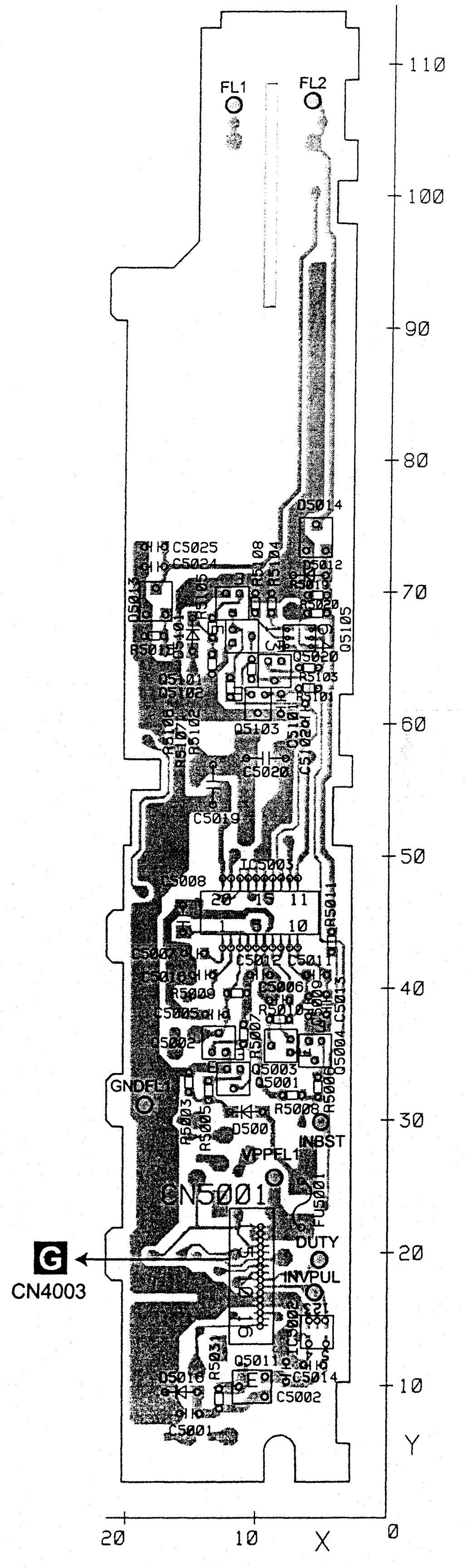

160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
Y
20
10
X
0

4.9 INVERTER PCB

I INVERTER PCB **SIDE A**


CN5002
LCD PANEL
C5023
T5001
IC5004
D5018
R5018
C5015
C5005
D5010
C5018
R5017
VR5001
S5001
NAVI/AV
R5002
C5031
S5002
POS
R5022
R5001
D5030
R5030
S5003
R5009
R5014
NAVI MENU
R5023
R5004
110
100
90
80
70
60
50
40
30
20
10
0
Y
X
10
20

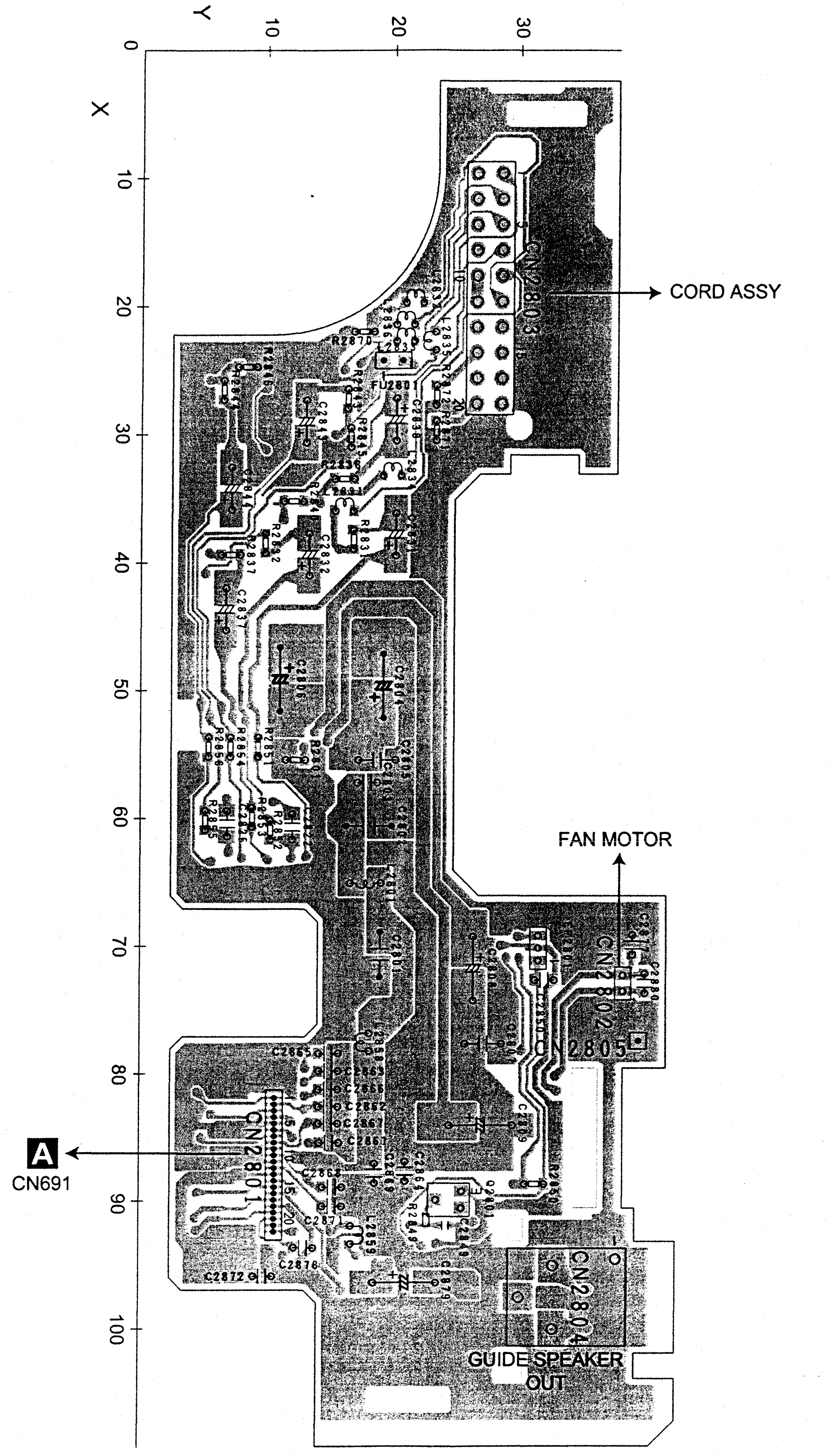
I INVERTER PCB **SIDE B**


FL1
FL2
D5014
C5025
C5024
D5012
D5105
R5104
R5103
R5101
R5102
D5103
C5020
C5019
C5008
IC5003
20
11
10
1
C5017
R5009
C5005
C5006
Q5003
Q5001
GNDFL1
R5003
D5001
INBST
VPPFL1
CN5001
DUTY
INVPUL
G
CN4003
Q5011
C5014
C5002
C5001
D5016
110
100
90
80
70
60
50
40
30
20
10
Y
20
10
X
0

4.10 RELAY PCB

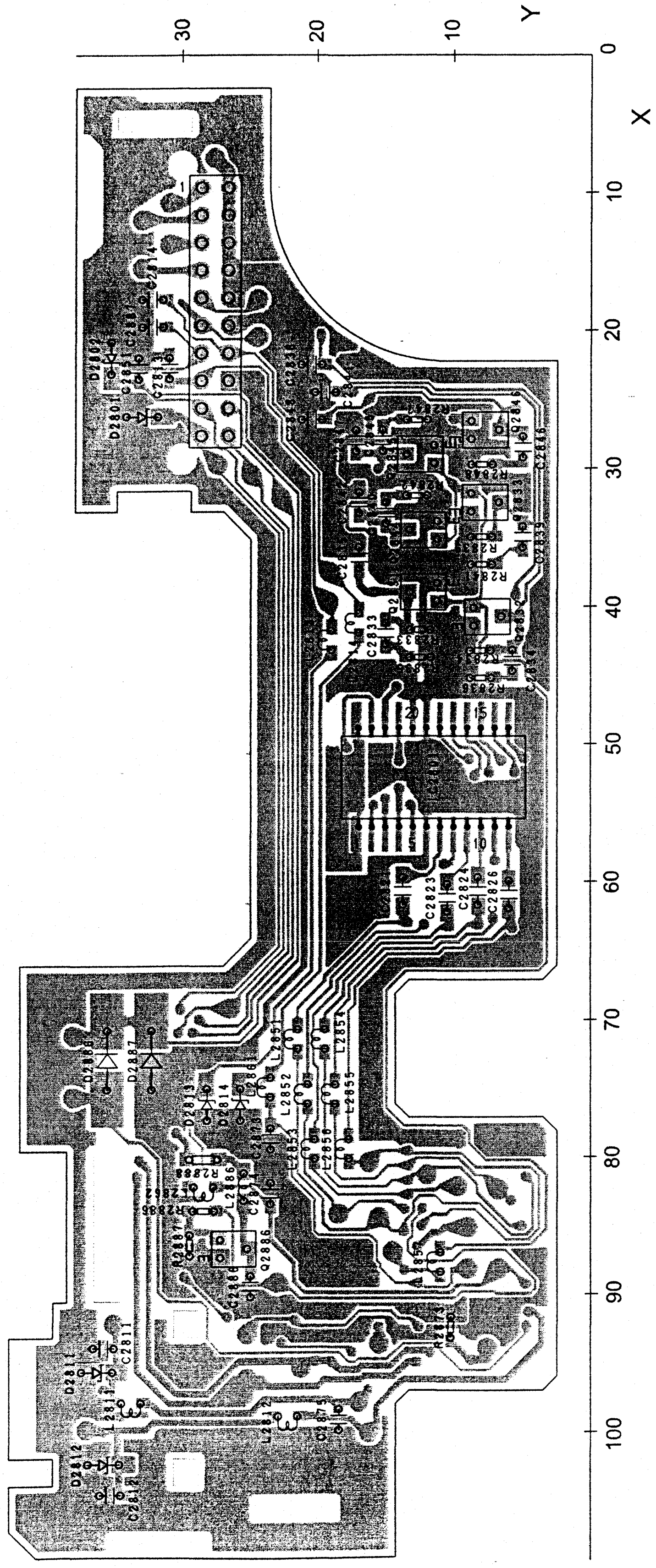
J RELAY PCB

SIDE A


Y
0
10
20
30
X
10
20
30
40
50
60
70
80
90
100
CN2803
CORD ASSY
FAN MOTOR
CN2802
CN2805
CN2801
A
CN691
CN2804
GUIDE SPEAKER OUT

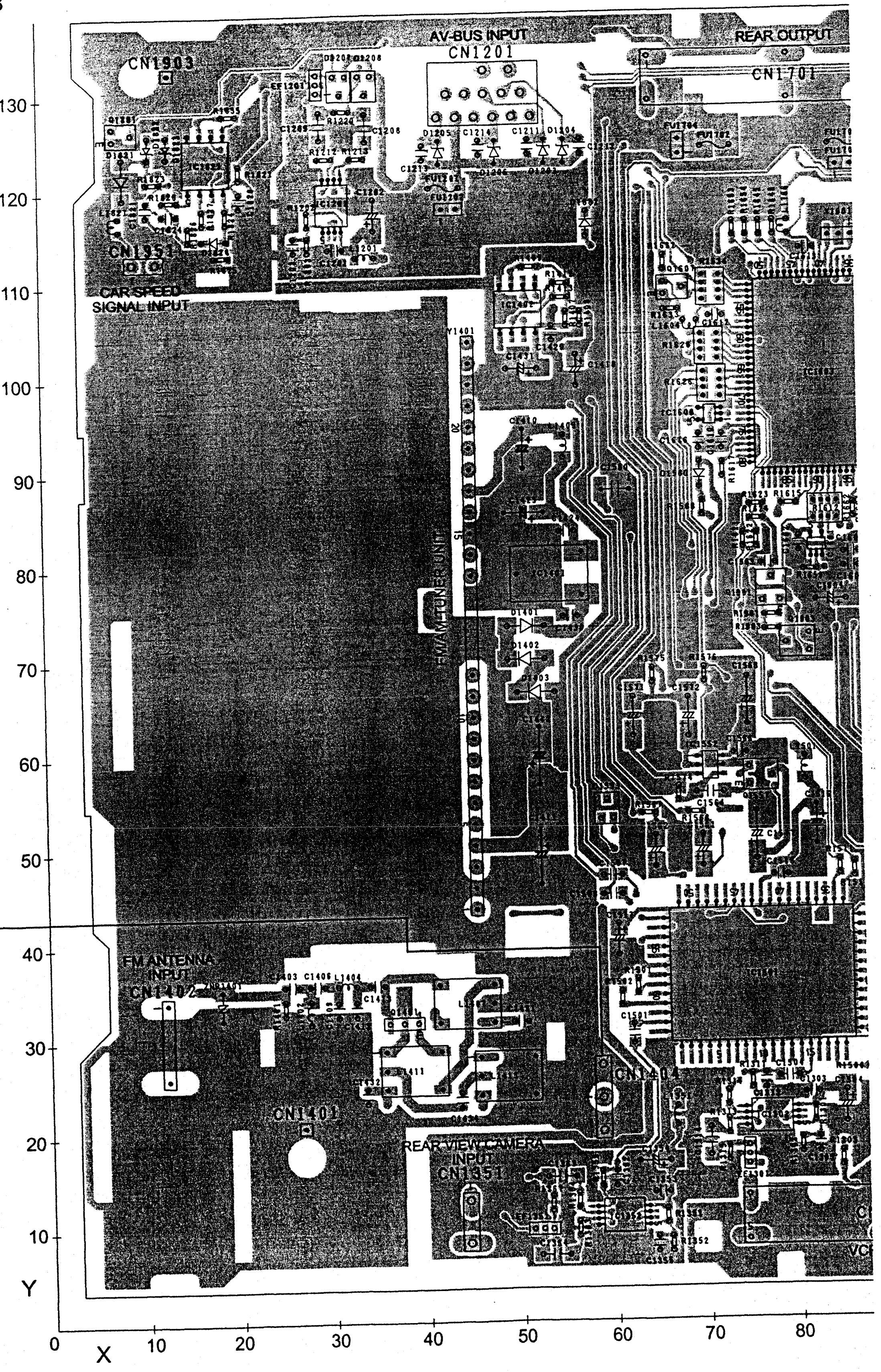
J RELAY PCB

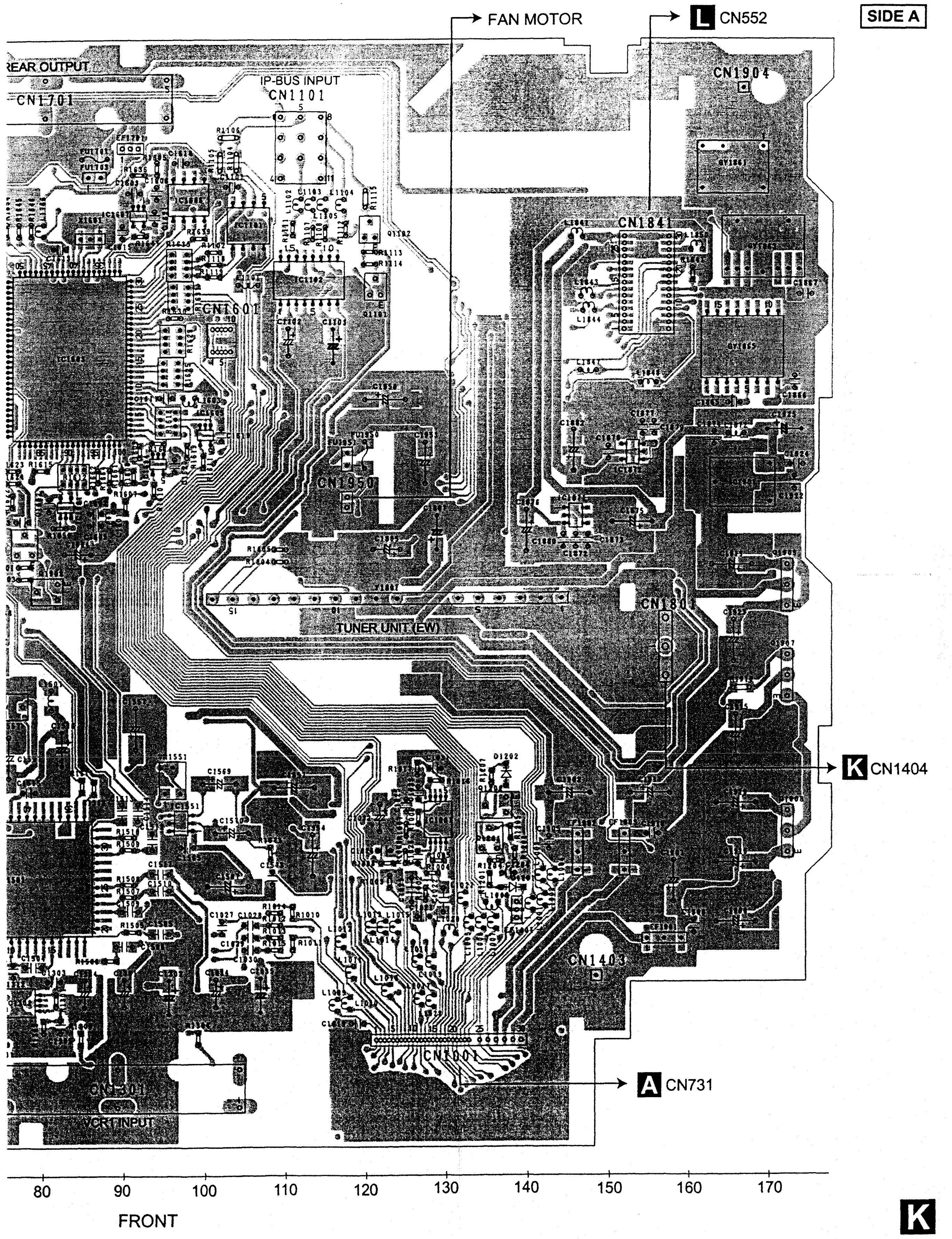
SIDE B


30
20
10
Y
0
X
10
20
30
40
50
60
70
80
90
100

4.11 MOTHER PCB

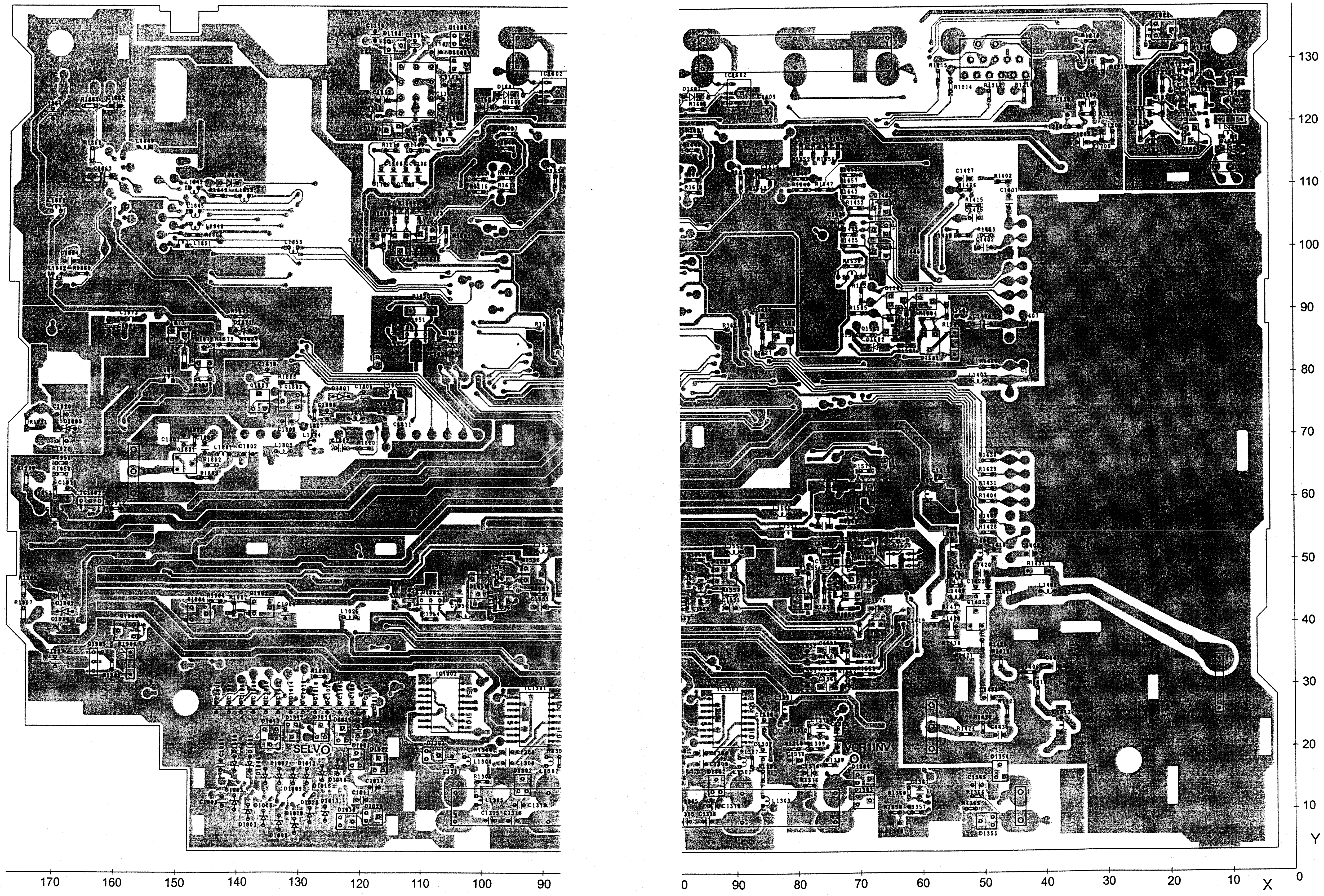
K MOTHER PCB


AV-BUS INPUT
CN1201
REAR OUTPUT
CN1701
CN1903
CN1951
CAR SPEED SIGNAL INPUT
FM ANTENNA INPUT
CN1402
CN1401
REAR VIEW CAMERA INPUT
CN1351
CN1404
K
CN1801
Y
X
0
10
20
30
40
50
60
70
80
90
100
110
120
130


FAN MOTOR
L CN552
SIDE A
REAR OUTPUT
CN1701
IP-BUS INPUT
CN1101
CN1904
CN1841
CN1601
CN1950
TUNER UNIT (EW)
CN1801
K CN1404
CN1403
CN1001
A CN731
CN1301
VCR1 INPUT
80
90
100
110
120
130
140
150
160
170
FRONT

K MOTHER PCB

SIDE B


SELVO
VCR1INV
IC1302
IC1301
X
Y
170
160
150
140
130
120
110
100
90
0
90
80
70
60
50
40
30
20
10
0
130
120
110
100
90
80
70
60
50
40
30
20
10

4.12 GPS UNIT

P GPS UNIT

SIDE A

A

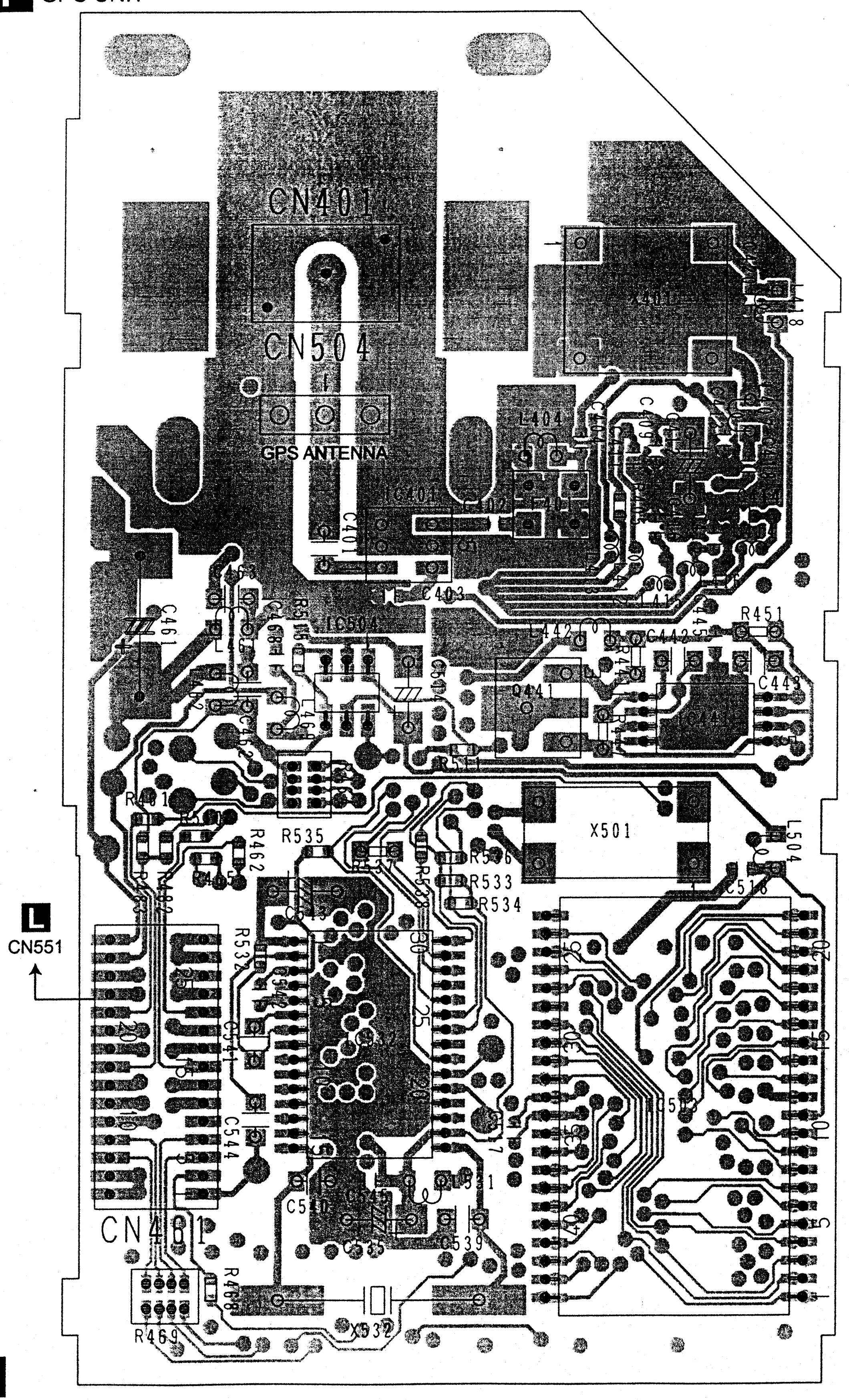
B

C

D

E

F


CN401
CN504
GPS ANTENNA
X401
L418
L404
C409
IC401
C401
C402
C403
C461
IC504
L441
L442
C442
R451
C443
Q441
IC441
R511
C462
L461
R461
R462
R535
R537
R536
R533
R534
X501
L504
C516
C543
R532
C542
C541
C544
IC532
IC503
C540
C545
C535
C539
R531
L
CN551
CN461
R468
R469
X532

IC,Q

IC401

IC504
Q441
IC441

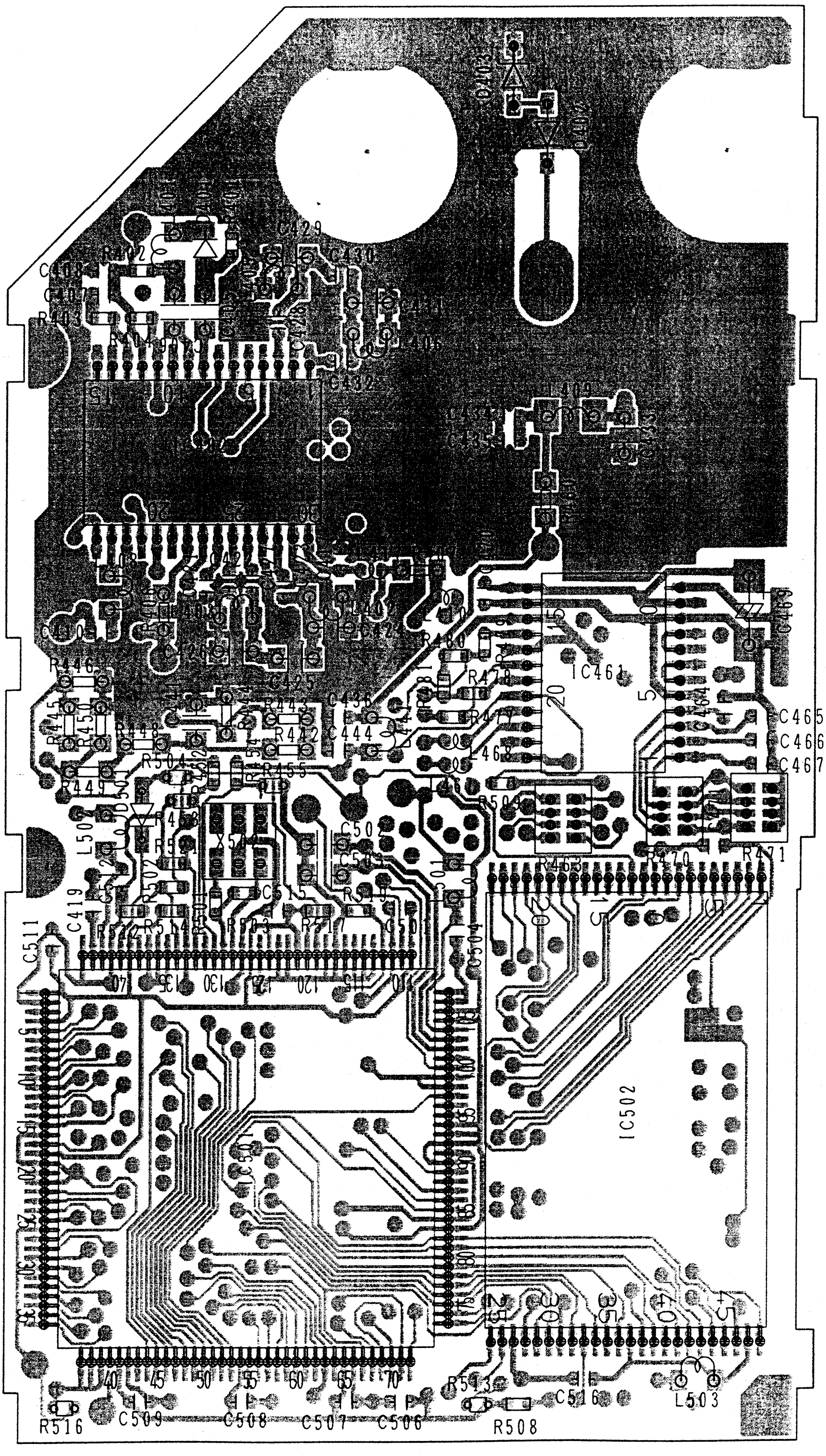
IC532

IC503

P

P GPS UNIT

SIDE B


D403
D402
C429
C430
C408
R402
C407
R403
R404
C431
R406
C432
IC402
L409
C435
C434
C42
C410
C426
C425
C424
R480
R446
R445
R451
R448
R443
R442
C436
C444
R478
R477
IC461
C465
C466
C467
C469
L463
R449
R504
R453
R454
R455
R503
L501
R501
X501
C502
C503
C419
R515
C515
R519
R517
R513
C511
C504
R463
R470
R471
C501
IC502
IC501
C509
C508
C507
C506
R516
R513
C516
L503
R508
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
100
105
110
115
120
125
130
135
140

IC,Q

IC402

IC461

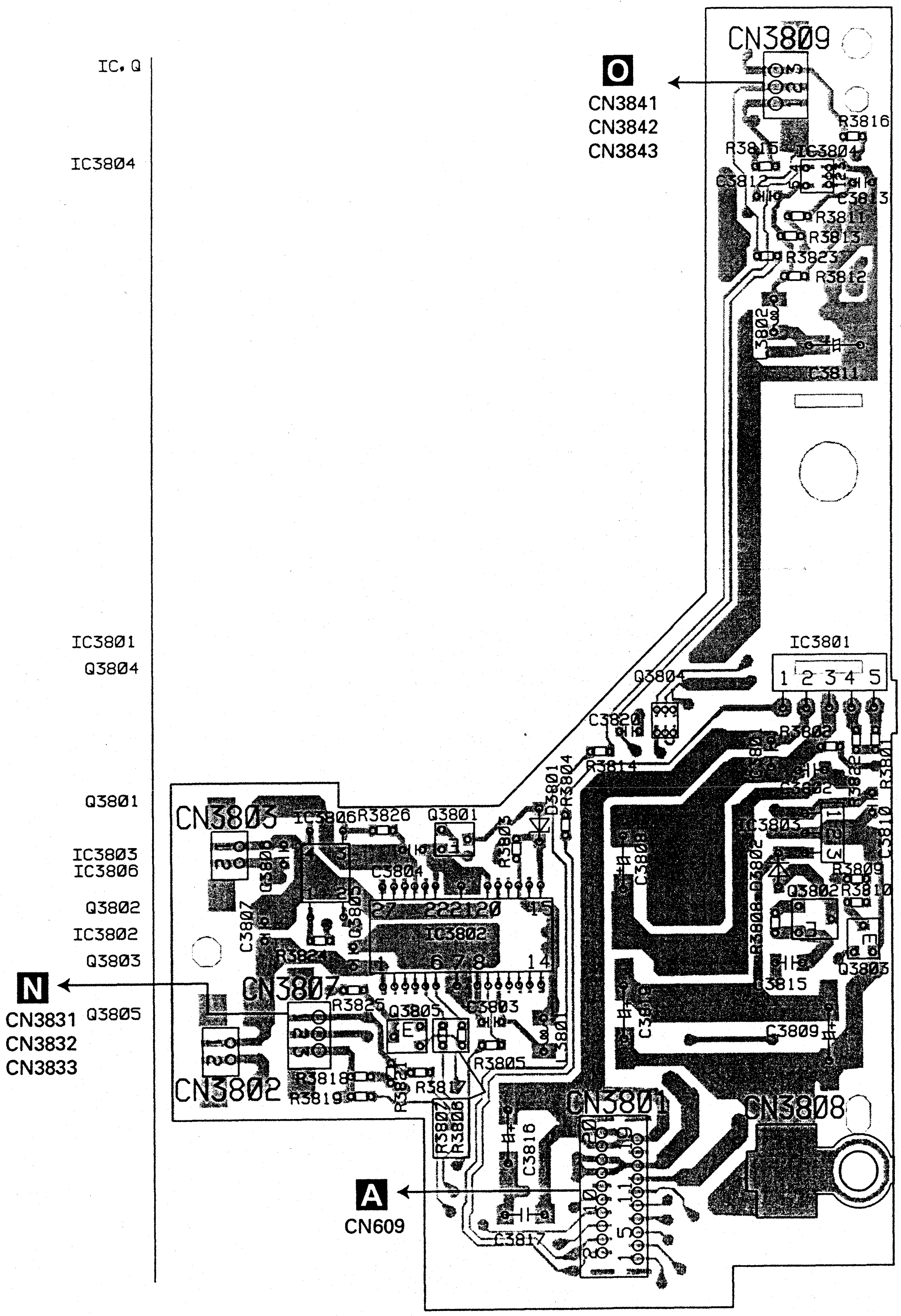
IC502

IC501

4.13 MAIN UNIT

M MAIN UNIT

SIDE A

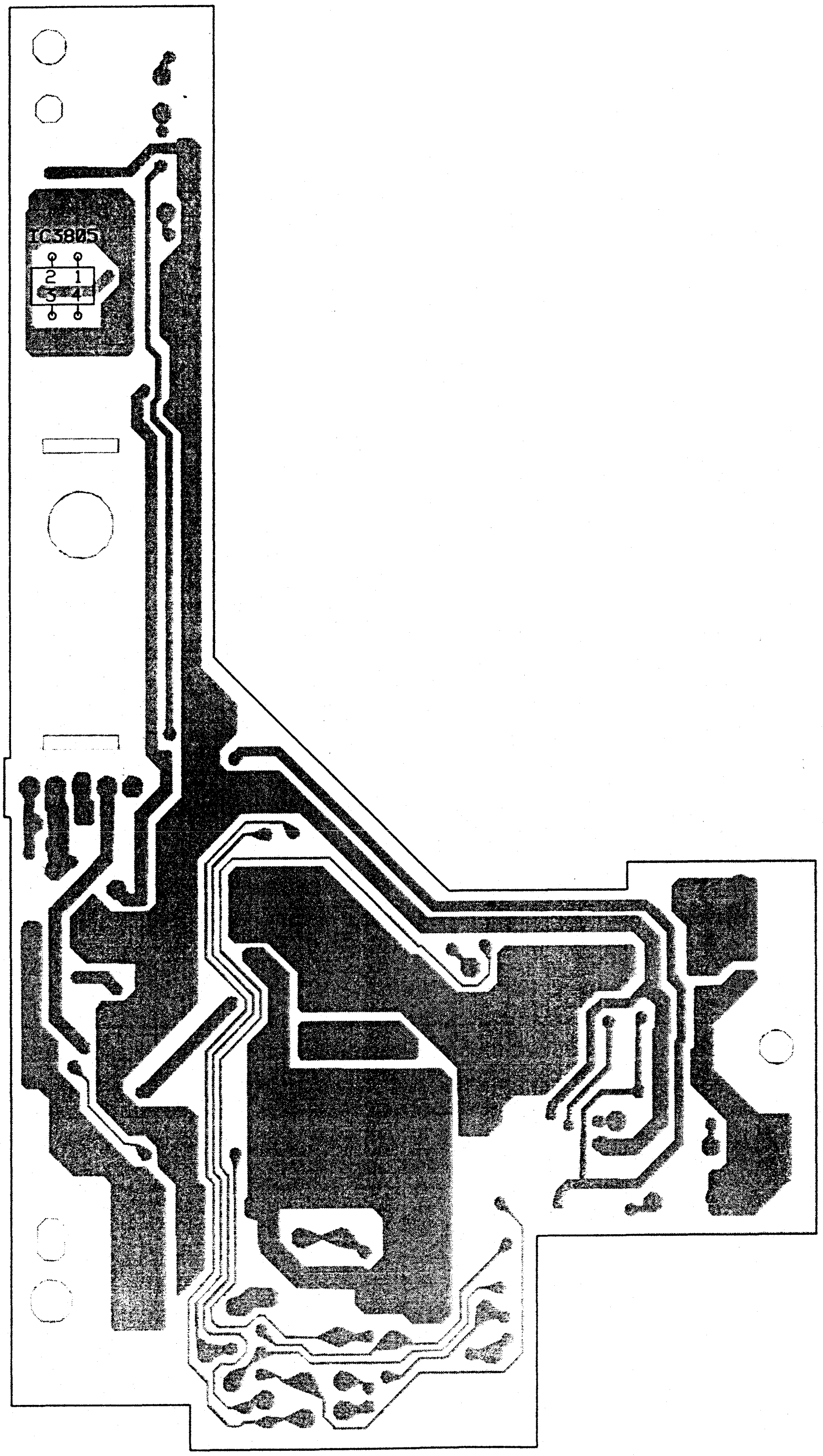

IC. Q
IC3804
IC3801
Q3804
Q3801
IC3803
IC3806
Q3802
IC3802
Q3803
Q3805
O
CN3841
CN3842
CN3843
N
CN3831
CN3832
CN3833
A
CN609
CN3809
R3816
R3815
IC3804
C3812
C3813
R3811
R3813
R3823
R3812
D3802
C3811
IC3801
1 2 3 4 5
Q3804
C3820
R3802
R3814
D3801
R3804
C3802
R3801
C3810
IC3803
R3809
R3810
C3808
D3802
R3808
Q3802
Q3803
C3815
C3809
CN3803
IC3806
R3826
Q3801
R3803
C3804
C3807
C3805
IC3802
R3824
CN3807
R3825
Q3805
C3803
R3805
L3801
CN3802
R3818
R3819
R3821
R3817
R3807
R3806
C3816
CN3801
C3817
CN3808
C3801

M MAIN UNIT

SIDE B

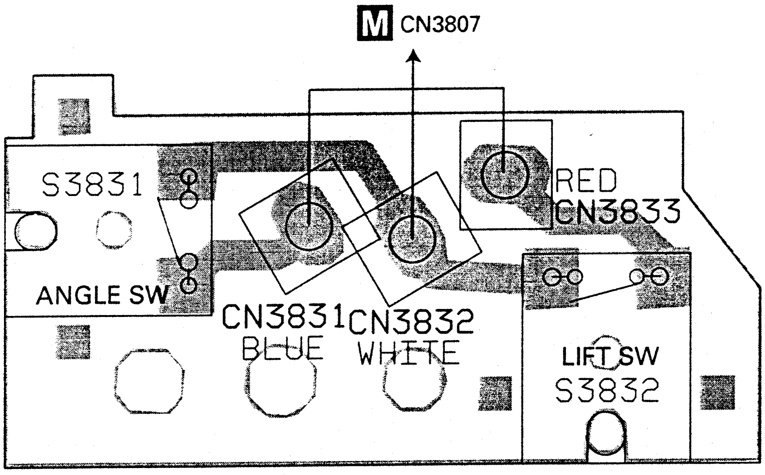
IC, Q

IC3805

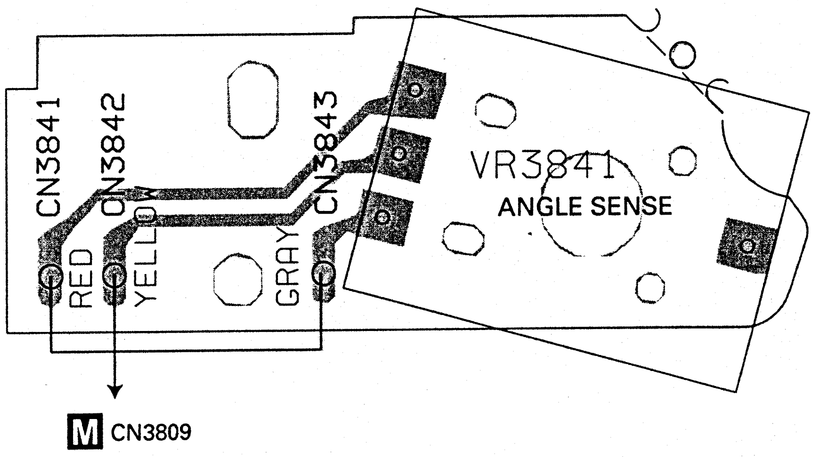

IC3805
2 1
3 4

4.14 SW UNIT AND VOLUME UNIT

N SW UNIT


M CN3807
S3831
ANGLE SW
CN3831
BLUE
CN3832
WHITE
RED
CN3833
LIFT SW
S3832

O VOLUME UNIT


CN3841
RED
CN3842
YELLOW
CN3843
GRAY
VR3841
ANGLE SENSE
M CN3809

N O

5. ELECTRICAL PARTS LIST

NOTE:

- *Parts whose parts numbers are omitted are subject to being not supplied.*
- *The part numbers shown below indicate chip components.*

Chip Resistor

RS1/○S○○○J,RS1/○○S○○○J

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

- *The ⚠ mark found on some component parts indicatesthe importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Meaning of the figures and others in the parentheses in the parts list.*

Example) IC 301 is on the point (face A, 91 of x-axis, and 111 of y-axis) of the corresponding PC board.

IC 301 (A, 91, 111) IC NJM2068V

A

Unit Number:CWM9948(AVIC-N2/XU/UC)
Unit Number:CWM9947(AVIC-X1R/XU/EW)
Unit Name:CC Unit

MISCELLANEOUS

Circuit Symbol and No.		Part No.
IC 1	(B,139,31) IC	K4S561632E-TL75
IC 2	(A,142,51) IC	UPD705103GM-180S1
IC 3	(B,156,31) IC	HY57V561620CLT-H
IC 4	(A,158,22) IC	TC7SZ08FU
IC 5	(B,147,55) IC	PD6336C
IC 101	(A,136,18) IC	TC74LCX08FTS1
IC 102	(A,137,12) IC	TC7SH04FUS1
IC 103	(A,135,28) IC	TC74LCX245FTS1
IC 104	(A,144,28) IC	TC74LCX245FTS1
IC 105	(A,152,28) IC	TC74LCX245FTS1
IC 106	(A,161,28) IC	TC74LCX245FTS1
IC 107	(A,163,38) IC	TC74LCX541FTS1
IC 108	(A,163,46) IC	TC74LCX541FTS1
IC 109	(A,163,55) IC	TC74LCX541FTS1
IC 110	(B,119,40) IC (UC)	PEH005A
	(B,119,40) IC (EW)	PEH003A
IC 111	(B,119,24) IC (UC)	PEH006A
	(B,119,24) IC (EW)	PEH004A
IC 112	(B,107,62) IC	TC7SH00FUS1
IC 113	(B,119,58) IC	M5M5V216ATP-70HI
IC 114	(B,107,59) IC	TC7SH08FUS1
IC 201	(A,105,25) IC	MB86291APFVS-G-DL
IC 301	(A,145,19) IC	M51957BFP
IC 302	(A,142,11) IC	TC7SH08FUS1
IC 304	(A,110,53) IC	AK4351VT
IC 305	(A,98,63) IC	AK5381VT
IC 309	(A,122,49) IC	TC7SH08FUS1
IC 601	(A,46,99) IC	PD5937A
IC 602	(B,45,98) IC	TC74VHCT08AFTS1
IC 603	(B,53,100) IC	TC7SH08FUS1
IC 604	(A,126,88) IC	TC7SH08FUS1
IC 605	(A,131,89) IC	TC7SH08FUS1
IC 608	(B,60,94) IC	TC7WT125FU
IC 611	(B,44,104) IC	TC7S04FU
IC 612	(B,51,91) IC	S-80840CNMC-B8Z
IC 613	(B,48,104) IC	TC7SH00FUS1
IC 691	(B,165,143) IC	UPD4721GSS1
IC 751	(B,98,102) IC	CXA1645M
IC 752	(B,117,121) IC	NJM2137V
IC 753	(B,88,117) IC	NJM2235V
IC 754	(B,79,120) IC	NJM2561F1
IC 755	(B,107,116) IC	NJM2561F1
IC 756	(B,100,117) IC	NJM2235V
IC 757	(B,87,98) IC	TC7SET08FUS1
IC 758	(B,85,92) IC	TC7SZ08FU
IC 801	(B,62,83)	PQ018EZ01ZP
IC 803	(B,32,58) IC	TPS5102IDBT
IC 804	(B,67,59) IC	TPS5102IDBT
IC 805	(B,15,64) IC	TPS5103IDB
IC 806	(A,74,92) IC	S-L2980A33MC-C6S
IC 807	(A,63,111) IC	TPD1018F
IC 808	(B,61,101) IC	S-812C52AUA-C3G
IC 810	(B,34,85) IC	S-812C56AUA-C3K
IC 2401	(A,136,107) IC	PML009A
IC 2402	(B,129,109) IC	TC7W66FU
IC 2403	(B,154,86) IC	TDA7052BT
IC 2404	(B,147,109) IC	NJM2058V
IC 2405	(A,34,137) IC	PAL007A
IC 2407	(B,134,130) IC	NJM3403AV
IC 2408	(B,134,118) IC	NJM2107F
IC 2551	(A,7,145) IC	TC7WT125FU
IC 2552	(B,135,109) IC	NJM2068V
IC 2553	(B,116,109) IC	NJM2068V
IC 2601	(B,165,109) IC	NJM3403AV
IC 2701	(B,42,28) IC	TC7SH08FUS1
IC 2702	(B,38,88) IC	TC7SH14FUS1
Q 201	(A,126,11) Transistor	UMD2N
Q 301	(A,151,22) Transistor	DTC114EU
Q 601	(B,152,135) Transistor	2SC4081
Q 602	(B,51,85) Transistor	UMD2N
Q 621	(B,41,109) Transistor	IMD2A
Q 691	(B,162,150) Transistor	2SD1767
Q 692	(B,155,149) Transistor	IMD3A
Q 704	(B,63,154) Transistor	2SA1576
Q 731	(B,69,114) Transistor	IMD3A
Q 751	(B,87,103) Transistor	2SC4081
Q 752	(B,78,112) Transistor	2SC4081
Q 754	(A,77,106) Transistor	2SC4081
Q 801	(B,30,34) Transistor	2SB1260
Q 802	(B,25,26) Transistor	DTC114EU
Q 803	(B,43,34) Transistor	2SA1834F5
Q 804	(B,55,35) Transistor	DTC114EU
Q 805	(A,122,137) FET	RSQ030P03
Q 806	(A,119,134) Transistor	DTC144EU
Q 807	(A,36,81) Transistor	2SB1260
Q 808	(B,45,85) Transistor	DTC114EU
Q 809	(A,89,50) Transistor	2SA1797
Q 810	(A,92,57) Transistor	DTC114EU
Q 811	(B,13,51) FET	RK4936
Q 814	(B,62,45) Transistor	DTC114EU
Q 815	(B,45,69) FET	RK4936
Q 816	(B,80,68) FET	RK4936
Q 819	(B,45,48) FET	RK4936
Q 820	(B,80,49) FET	RK4936
Q 821	(B,85,149) Transistor	2SA1834F5
Q 822	(B,91,153) Transistor	DTC114EU
Q 823	(B,111,136) Transistor	2SC4081
Q 824	(B,104,134) Transistor	2SB1184F5
Q 825	(B,114,136) Transistor	2SC4081
Q 828	(B,65,115) Transistor	IMX1
Q 829	(B,67,106) Transistor	2SB1184F5
Q 830	(B,30,85) Transistor	UMF23N
Q 832	(A,114,137) FET	RSQ030P03
Q 835	(B,118,139) Transistor	2SC4081
Q 837	(B,40,118) Transistor	2SC4081
Q 838	(A,111,134) Transistor	DTC144EU
Q 839	(A,72,109) Transistor	UMD2N
Q 840	(B,68,136) Transistor	2SA1576
Q 843	(B,66,95) Transistor	2SD1767
Q 951	(A,75,95) Transistor	DTC124EU
Q 971	(B,18,125) Transistor	IMX2
Q 972	(B,18,116) Transistor	IMD3A
Q 973	(B,7,119) Transistor	2SD1767
Q 2401	(B,125,128) Transistor	UMD2N
Q 2402	(B,128,133) Transistor	DTC323TU
Q 2403	(B,128,128) Transistor	DTC323TU
Q 2408	(B,122,106) Transistor	UMD2N
Q 2409	(B,123,110) Transistor	DTC323TU
Q 2410	(B,125,119) Transistor	UMD2N
Q 2414	(B,126,113) Transistor	DTC124EU
Q 2415	(B,126,105) Transistor	DTC124EU
Q 2416	(B,139,109) Transistor	UMD2N
Q 2417	(B,139,106) Transistor	DTC323TU
Q 2418	(B,139,112) Transistor	DTC323TU
Q 2419	(B,22,114) Transistor	UMD2N
Q 2420	(B,142,85) Transistor	DTC114EU
Q 2421	(B,33,114) Transistor	UMD2N
Q 2422	(B,27,112) Transistor	2SC4081
Q 2427	(B,25,123) Transistor	DTC124EU
Q 2428	(B,28,126) Transistor	DTC124EU
Q 2603	(B,113,96) Transistor	UMD2N
Q 2604	(B,164,98) Transistor	DTC323TU
Q 2605	(B,161,98) Transistor	DTC323TU
Q 2606	(B,116,96) Transistor	UMD2N
Q 2607	(B,158,98) Transistor	DTC323TU
Q 2608	(B,119,96) Transistor	UMD2N
Q 2610	(B,33,123) Transistor	UMD2N
Q 2611	(B,33,117) Transistor	UMD2N
Q 2701	(B,42,24) Transistor	DTC114TU
Q 2702	(B,35,10) Transistor	DTC144EU
Q 2703	(B,35,17) Transistor	2SA1577
Q 2704	(B,39,9) Transistor	UMH1N
Q 2705	(B,39,17) Transistor	2SA1577
Q 2706	(B,35,22) Transistor	IMD2A
Q 2707	(A,36,11) Transistor	DTC144EU
Q 2708	(A,36,18) Transistor	2SA1577
Q 2709	(A,39,11) Transistor (EW)	DTC144EU
Q 2710	(A,39,18) Transistor (EW)	2SA1577
Q 2711	(A,42,10) Transistor (EW)	UMH1N
Q 2712	(A,42,18) Transistor (EW)	2SA1577
Q 2713	(B,36,100) Transistor	IMD2A
Q 2714	(A,42,25) Transistor	2SA1576
Q 2715	(B,35,107) Transistor	2SD1767
Q 2716	(A,35,25) Transistor	DTC124EU
Q 2717	(B,35,92) Transistor	DTC114EU
D 610	(B,54,89) Diode	1SS355
D 691	(B,154,152) Diode	HZU8R2(B1)
D 692	(A,172,136) Diode	UDZS20(B)
D 693	(A,172,132) Diode	UDZS20(B)
D 694	(A,167,136) Diode	UDZS20(B)
D 695	(A,167,132) Diode	UDZS20(B)
D 696	(A,170,136) Diode	UDZS20(B)
D 697	(A,170,132) Diode	UDZS20(B)
D 698	(A,165,136) Diode	UDZS20(B)
D 699	(A,165,132) Diode	UDZS20(B)
D 700	(A,168,136) Diode	UDZS6R8(B)
D 707	(B,63,151) Diode	DAN202U
D 708	(A,64,135) Diode	5KP22A
D 731	(B,144,144) Diode	UDZS6R8(B)
D 732	(A,134,136) Diode	UDZS6R8(B)
D 733	(A,136,136) Diode	UDZS6R8(B)
D 734	(A,137,136) Diode	UDZS6R8(B)
D 735	(A,139,136) Diode	UDZS6R8(B)
D 736	(B,151,151) Diode	UMZ6R8N
D 737	(B,149,137) Diode	UMZ6R8N
D 738	(B,145,138) Diode	UMZ6R8N
D 739	(B,154,142) Diode	UMZ6R8N
D 740	(B,151,142) Diode	UMZ6R8N
D 741	(B,148,151) Diode	UMZ6R8N
D 742	(A,162,142) Diode	UDZS6R8(B)
D 743	(A,162,140) Diode	UDZS6R8(B)
D 744	(A,162,138) Diode	UDZS6R8(B)
D 745	(B,137,144) Diode	UDZS6R8(B)
D 746	(B,138,141) Diode	UDZS6R8(B)
D 747	(B,142,141) Diode	UDZS6R8(B)
D 748	(B,142,144) Diode	UDZS6R8(B)
D 749	(A,141,136) Diode	UDZS6R8(B)
D 750	(A,143,137) Diode	UDZS10(B)
D 753	(B,150,146) Diode	UDZS6R8(B)
D 754	(B,145,141) Diode	UDZS6R8(B)
D 802	(B,39,57) Diode	RB400D
D 803	(B,39,61) Diode	RB400D
D 804	(B,74,57) Diode	RB400D

Circuit Symbol and No.	Part No.
D 805 (B,74,61) Diode	RB400D
D 806 (B,9,59) Diode	RB400D
D 807 (A,41,56) Diode	RB060L-40
D 808 (A,41,60) Diode	RB060L-40
D 809 (A,75,55) Diode	RB060L-40
D 810 (A,75,60) Diode	RB060L-40
D 812 (B,39,113) Diode	HZU6R8(B2)
D 814 (A,104,138) Diode	KS926S2
D 815 (B,100,128) Diode	HZU7R5(B3)
D 816 (B,61,118) Diode	UDZS18(B)
D 817 (B,71,93) Diode	UDZS20(B)
D 818 (A,20,51) Diode	RB060L-40
D 820 (B,61,131) Diode	S1G-6904G2P
D 821 (B,64,137) Diode	1SS355
D 822 (B,64,133) Diode	1SS355
D 828 (B,51,133) Diode	S1G-6904G2P
D 830 (B,96,138) Diode	RB500V-40
D 831 (B,96,136) Diode	RB500V-40
D 832 (A,8,68) Diode	S1G-6904G2P
D 833 (B,57,150) Diode	1SS400
D 971 (B,13,119) Diode	RB751V40
D 972 (B,13,121) Diode	RB751V40
D 973 (B,14,117) Diode	HZU8R2(B1)
D 974 (B,12,122) Diode	UDZ12(B)
D 2404 (B,110,97) Diode	DAN202U
D 2405 (B,128,130) Diode	DAP202U
D 2406 (A,134,122) Diode	1SS355
D 2407 (A,134,129) Diode	UDZS4R7(B)
D 2408 (B,142,109) Diode	DAP202U
D 2409 (B,23,111) Diode	UDZS8R2(B)
D 2410 (B,24,120) Diode	DAN202U
D 2411 (B,27,119) Diode	DAN202U
D 2412 (B,34,120) Diode	DAN202U
D 2413 (B,29,122) Diode	DAN202U
D 2551 (A,13,146) Diode	UDZS6R8(B)
D 2701 (B,37,27) Diode	1SS355
D 2702 (B,63,8) Diode Network	DA204U
D 2703 (B,51,28) Diode Network	DA204U
D 2704 (B,48,14) Diode	UDZS5R6(B)
D 2705 (A,50,21) Diode Network	DA204U
D 2706 (A,50,10) Diode Network	DA204U
D 2707 (A,50,13) Diode Network	DA204U
D 2708 (A,50,15) Diode Network	DA204U
D 2709 (B,51,23) Diode Network	DA204U
D 2710 (B,51,25) Diode Network	DA204U
D 2711 (A,50,18) Diode Network	DA204U
D 2712 (B,35,97) Diode	HZU8R2(B1)
D 2713 (B,35,95) Diode	HZU5R6(B2)
D 2714 (B,45,21) Diode	DAP202U
D 2715 (B,38,22) Diode	DAP202U
D 2821 (A,163,135) Diode	RB500V-40
L 1 (B,132,17) Inductor	CTF1558
L 2 (B,147,18) Inductor	CTF1558
L 3 (A,158,17) Inductor	CTF1410
L 5 (A,139,33) Inductor	CTF1556
L 6 (A,128,35) Inductor	CTF1295
L 7 (B,162,55) Inductor	CTF1558
L 8 (A,149,68) Inductor	CTF1556
L 101 (A,132,16) Inductor	CTF1557
L 102 (A,134,12) Inductor	CTF1557

Circuit Symbol and No.	Part No.
L 103 (A,140,28) Inductor	CTF1557
L 104 (A,148,27) Inductor	CTF1557
L 105 (A,156,27) Inductor	CTF1557
L 106 (A,165,27) Inductor	CTF1557
L 107 (A,163,34) Inductor	CTF1557
L 108 (A,163,42) Inductor	CTF1557
L 109 (A,163,51) Inductor	CTF1557
L 110 (B,106,38) Inductor	CTF1556
L 111 (B,106,23) Inductor	CTF1556
L 112 (B,108,55) Inductor	CTF1556
L 113 (B,109,60) Inductor	CTF1557
L 114 (B,109,55) Inductor	CTF1557
L 201 (A,127,29) Inductor	CTF1556
L 203 (A,86,10) Inductor	CTF1556
L 204 (A,105,45) Inductor	CTF1488
L 205 (A,124,21) Inductor	CTF1556
L 206 (A,89,45) Inductor	CTF1556
L 207 (A,95,43) Inductor	CTF1379
L 301 (A,141,19) Inductor	CTF1557
L 302 (A,145,13) Inductor	CTF1557
L 305 (A,103,54) Inductor	CTF1556
L 306 (A,90,61) Inductor	CTF1556
L 307 (A,90,65) Inductor	CTF1556
L 308 (A,110,59) Inductor	CTF1334
L 312 (A,121,52) Inductor	CTF1410
L 601 (B,53,97) Inductor	CTF1334
L 602 (B,44,90) Inductor	CTF1334
L 603 (B,44,93) Inductor	CTF1334
L 604 (A,44,88) Inductor	CTF1334
L 605 (B,158,135) Inductor	CTF1334
L 606 (A,126,91) Inductor	CTF1334
L 607 (A,131,86) Inductor	CTF1334
L 610 (B,56,94) Inductor	CTF1334
L 613 (B,44,106) Inductor	CTF1334
L 616 (B,48,106) Inductor	CTF1334
L 617 (B,50,87) Inductor	CTF1334
L 619 (A,129,84) Inductor	CTF1306
L 620 (A,128,81) Inductor	CTF1306
L 621 (A,129,81) Inductor	CTF1306
L 622 (A,127,84) Inductor	CTF1384
L 623 (A,127,81) Inductor	CTF1387
L 624 (A,125,84) Inductor	CTF1334
L 625 (A,98,83) Inductor	CTF1306
L 626 (A,96,83) Inductor	CTF1306
L 627 (A,128,84) Inductor	CTF1306
L 628 (A,124,84) Inductor	CTF1306
L 629 (A,125,81) Inductor	CTF1306
L 630 (A,131,84) Inductor	CTF1306
L 631 (A,122,81) Inductor	CTF1334
L 632 (A,121,84) Inductor	CTF1334
L 633 (A,121,81) Inductor	CTF1334
L 634 (A,120,84) Inductor	CTF1334
L 635 (A,122,84) Inductor	CTF1306
L 636 (A,105,87) Inductor	CTF1334
L 637 (A,120,81) Inductor	CTF1306
L 638 (A,118,84) Inductor	CTF1306
L 639 (A,118,81) Inductor	CTF1306
L 640 (A,117,84) Inductor	CTF1306
L 641 (A,124,81) Inductor	CTF1306
L 644 (A,115,84) Inductor	CTF1306

Circuit Symbol and No.	Part No.
L 645 (A,115,81) Inductor	CTF1306
L 646 (A,114,84) Inductor	CTF1334
L 647 (A,114,81) Inductor	CTF1334
L 648 (A,112,81) Inductor	CTF1378
L 649 (A,110,81) Inductor	CTF1378
L 650 (A,109,81) Inductor	CTF1378
L 651 (A,105,81) Inductor	CTF1378
L 652 (A,103,84) Inductor	CTF1334
L 653 (A,103,81) Inductor	CTF1467
L 654 (A,102,84) Inductor	CTF1306
L 660 (A,25,83) Inductor	CTF1463
L 661 (A,26,85) Inductor	CTF1386
L 662 (A,26,87) Inductor	CTF1306
L 663 (A,26,89) Inductor	CTF1306
L 665 (B,18,90) Inductor	CTF1306
L 667 (B,15,90) Inductor	CTF1467
L 668 (B,18,91) Inductor	CTF1334
L 669 (B,15,92) Inductor	CTF1306
L 670 (B,18,93) Inductor	CTF1306
L 671 (A,26,90) Inductor	CTF1306
L 672 (B,15,94) Inductor	CTF1306
L 673 (A,26,92) Inductor	CTF1306
L 674 (B,18,95) Inductor	CTF1306
L 675 (A,26,94) Inductor	CTF1463
L 676 (B,16,98) Inductor	CTF1463
L 677 (B,27,96) Inductor	CTF1463
L 678 (B,18,104) Inductor	CTF1463
L 679 (A,27,107) Inductor	CTF1453
L 680 (B,28,101) Inductor	CTF1463
L 681 (A,42,114) Inductor	CTF1306
L 682 (A,40,114) Inductor	CTF1357
L 683 (A,40,121) Inductor	CTF1357
L 684 (A,39,114) Inductor	CTF1357
L 685 (A,37,114) Inductor	CTF1357
L 686 (A,73,114) Inductor	CTF1306
L 687 (A,82,117) Inductor	CTF1306
L 688 (A,34,114) Inductor	CTF1357
L 689 (A,34,122) Inductor	CTF1306
L 690 (A,33,114) Inductor	CTF1334
L 691 (A,33,122) Inductor	CTF1334
L 692 (A,80,122) Inductor	CTF1306
L 693 (A,31,114) Inductor	CTF1384
L 694 (A,78,122) Inductor	CTF1306
L 695 (A,30,121) Inductor	CTF1463
L 696 (A,77,122) Inductor	CTF1306
L 697 (A,78,114) Inductor	CTF1306
L 698 (A,29,109) Inductor	CTF1629
L 699 (A,66,115) Inductor	CTF1334
L 700 (A,56,122) Inductor	CTF1306
L 701 (A,18,110) Inductor	CTF1629
L 702 (B,61,149) Inductor	LCYC2R2K1608
L 703 (A,57,114) Inductor	CTF1306
L 704 (A,55,122) Inductor	CTF1306
L 705 (A,55,114) Inductor	CTF1306
L 706 (A,53,122) Inductor	CTF1306
L 707 (A,54,114) Inductor	CTF1306
L 708 (A,52,122) Inductor	CTF1306
L 709 (A,52,114) Inductor	CTF1306
L 710 (A,51,114) Inductor	CTF1306
L 711 (A,49,114) Inductor	CTF1306

Circuit Symbol and No.	Part No.
L 712 (A,46,121) Inductor	CTF1629
L 713 (A,76,114) Inductor	CTF1306
L 714 (A,74,114) Inductor	CTF1306
L 715 (A,73,122) Inductor	CTF1306
L 716 (A,70,113) Inductor	CTF1306
L 717 (A,72,114) Inductor	CTF1306
L 718 (B,158,146) Inductor	CTF1410
L 719 (B,170,150) Inductor	CTF1334
L 721 (A,36,114) Inductor	CTF1306
L 722 (A,36,122) Inductor	CTF1306
L 723 (A,22,112) Inductor	CTF1306
L 724 (A,24,112) Inductor	CTF1306
L 725 (A,25,112) Inductor	CTF1306
L 726 (A,37,122) Inductor	CTF1306
L 727 (A,25,121) Inductor	CTF1306
L 732 (A,158,139) Inductor	CTF1295
L 733 (A,157,141) Inductor	CTF1295
L 734 (A,157,143) Inductor	CTF1295
L 735 (B,145,148) Inductor	CTF1295
L 736 (B,143,148) Inductor	CTF1295
L 737 (B,141,144) Inductor	CTF1295
L 738 (B,139,144) Inductor	CTF1295
L 739 (B,138,148) Inductor	CTF1295
L 740 (B,136,148) Inductor	CTF1410
L 741 (A,145,140) Inductor	CTF1295
L 742 (A,142,140) Inductor	CTF1295
L 744 (A,117,81) Inductor	CTF1334
L 745 (A,152,141) Inductor	CTF1334
L 746 (A,153,141) Inductor	CTF1334
L 748 (A,148,141) Inductor	CTF1334
L 749 (A,150,141) Inductor	CTF1334
L 751 (B,85,106) Inductor	CTF1334
L 753 (B,95,111) Inductor	LCTAW680J3225
L 754 (B,91,94) Inductor	CTF1334
L 755 (A,102,122) Inductor	CTF1334
L 756 (B,18,86) Inductor	CTF1306
L 757 (B,15,87) Inductor	CTF1306
L 758 (B,18,88) Inductor	CTF1306
L 759 (A,111,121) Inductor	CTF1334
L 760 (B,84,88) Inductor	CTF1334
L 761 (B,95,119) Inductor	LCYC2R2K1608
L 762 (B,110,116) Inductor	LCYC2R2K1608
L 763 (B,92,115) Inductor	LCYC2R2K1608
L 764 (B,77,120) Inductor	LCYC2R2K1608
L 765 (A,80,106) Inductor	LCYC2R2K1608
L 766 (B,114,116) Inductor	LCYC2R2K1608
L 767 (A,32,106) Inductor	CTF1334
L 768 (A,30,106) Inductor	CTF1334
L 771 (A,131,136) Inductor	CTF1453
L 772 (A,128,136) Inductor	CTF1453
L 793 (A,131,81) Inductor	CTF1334
L 794 (A,102,81) Inductor	CTF1306
L 795 (A,100,84) Inductor	CTF1306
L 796 (A,100,81) Inductor	CTF1306
L 801 (A,12,54) Inductor	CTH1254
L 802 (A,16,68) Inductor	CTH1257
L 803 (A,41,49) Inductor	CTH1254
L 804 (A,41,68) Inductor	CTH1255
L 805 (A,75,48) Inductor	CTH1257
L 806 (A,77,68) Inductor	CTH1257

Circuit Symbol and No.		Part No.
L 807	(A,89,147) Inductor	CTH1262
L 808	(A,28,65) Inductor	CTH1253
L 809	(A,63,65) Inductor	CTH1253
L 810	(A,90,136) Choke Coil 100μH	CTH1315
L 811	(B,58,134) Inductor	CTF1556
L 812	(A,65,73) Inductor	CTF1453
L 815	(B,61,136) Inductor	CTF1556
L 816	(B,31,26) Inductor	CTF1306
L 817	(A,40,80) Inductor	LCKBW1R0M2520
L 818	(A,29,83) Inductor	LCYA220J2520
L 981	(B,73,81) Inductor	CTF1453
L 982	(B,74,32) Inductor	CTF1463
L 983	(B,63,33) Inductor	CTF1463
L 984	(A,93,79) Inductor	CTF1463
L 985	(A,93,86) Inductor	CTF1463
L 2402	(B,116,91) Inductor	CTF1306
L 2404	(A,148,105) Inductor	LCYA2R2J2520
L 2551	(A,12,143) Inductor	CTF1379
L 2554	(B,35,115) Inductor	CTF1334
L 2555	(B,35,111) Inductor	CTF1334
L 2601	(B,160,104) Inductor	CTF1334
L 2701	(B,48,16) Inductor	CTF1399
L 2702	(B,39,28) Inductor	CTF1334
L 2703	(B,42,88) Inductor	CTF1334
L 2704	(B,54,11) Inductor	CTF1306
L 2705	(B,56,11) Inductor	CTF1306
L 2706	(B,57,11) Inductor	CTF1306
L 2707	(B,55,18) Inductor	CTF1306
L 2708	(B,60,27) Inductor	CTF1306
L 2709	(B,55,23) Inductor	CTF1306
L 2710	(B,55,27) Inductor	CTF1306
L 2711	(B,51,30) Inductor	CTF1306
L 2712	(B,33,15) Inductor	CTF1334
L 2713	(B,37,17) Inductor	CTF1334
L 2714	(A,43,22) Inductor	CTF1334
L 2715	(A,39,22) Inductor (EW)	CTF1334
L 2716	(B,51,20) Inductor	CTF1334
L 2717	(B,58,7) Inductor	CTF1306
L 2800	(B,160,133) Inductor	CTF1305
TH601	(A,138,88) Thermistor	CCX1056
X 1	(A,143,72) Radiator 30.000MHz	CSS1633
X 2	(B,135,61) Radiator 33.000MHz	CSS1634
X 3	(B,161,49) Radiator 33.8688MHz	CSS1551
X 202	(A,127,22) Radiator 14.31818MHz	CSS1632
X 601	(A,47,88) Radiator 10.0MHz	CSS1577
VR751	(A,79,111) Semi-fixed 1kΩ(OB)	CCP1390
⚠FU691	(B,167,151) Fuse 2.5A	CEK1285
⚠FU692	(B,160,140) Fuse 2A	CEK1284
⚠FU801	(A,59,120) Fuse 1.25A	CEK1255
⚠FU802	(A,9,63) Fuse 4A	CEK1288
⚠FU803	(B,109,137) Fuse 375mA	CEK1277
⚠FU804	(A,24,72) Fuse 2.5A	CEK1285
⚠FU805	(A,62,72) Fuse 2.5A	CEK1285
⚠FU806	(A,63,117) Fuse 1A	CEK1254
⚠FU807	(A,40,83) Fuse 1A	CEK1280
⚠FU808	(B,46,120) Fuse 4A	CEK1260
⚠FU809	(A,125,136) Fuse 2A	CEK1284
⚠FU810	(A,97,132) Fuse 500mA	CEK1278
⚠FU811	(A,86,73) Fuse 2A	CEK1284
⚠FU812	(A,117,139) Fuse 250mA	CEK1276

Circuit Symbol and No.		Part No.
⚠FU813	(A,83,47) Fuse 2.5A	CEK1285
⚠FU814	(B,61,106) Fuse 250mA	CEK1276
⚠FU815	(A,136,133) Fuse 1A	CEK1280
⚠FU971	(A,15,119) Fuse 375mA	CEK1277
⚠FU2701	(B,31,106) Fuse 250mA	CEK1276
EF731	(B,151,148) EMI Filter	CCG1082
EF732	(B,148,148) EMI Filter	CCG1082
EF733	(B,142,137) EMI Filter	CCG1067
EF734	(B,142,134) EMI Filter	CCG1067
EF735	(B,151,138) EMI Filter	CCG1067
EF736	(B,153,138) EMI Filter	CCG1067
EF801	(A,96,137) EMI Filter	CCG1172
EF802	(A,78,144) EMI Filter	CCG1172
EF803	(A,80,153) EMI Filter	CCG1172

RESISTORS

R 1	(B,131,34)	RS1/16S0R0J
R 3	(B,131,37)	RS1/16S0R0J
R 5	(A,115,59)	RS1/16S473J
R 6	(A,121,63)	RS1/16S473J
R 7	(A,157,48)	RS1/16S220J
R 8	(A,120,70)	RS1/16S473J
R 10	(A,153,70)	RS1/16S104J
R 11	(A,155,70)	RAB4C473J
R 12	(A,145,67)	RS1/16S105J
R 13	(A,143,67)	RS1/16S151J
R 14	(B,147,34)	RS1/16S0R0J
R 16	(B,147,37)	RS1/16S0R0J
R 19	(A,121,68)	RS1/16S473J
R 20	(A,135,69)	RS1/16S101J
R 21	(A,139,67)	RS1/16S101J
R 22	(A,137,69)	RS1/16S101J
R 23	(B,137,60)	RS1/16S105J
R 24	(B,137,62)	RS1/16S151J
R 25	(A,134,69)	RS1/16S101J
R 26	(A,138,69)	RS1/16S101J
R 27	(A,135,67)	RS1/16S101J
R 28	(A,137,67)	RS1/16S101J
R 29	(A,134,67)	RS1/16S101J
R 30	(A,132,67)	RS1/16S101J
R 31	(A,133,69)	RS1/16S101J
R 32	(B,137,53)	RS1/16S473J
R 33	(A,131,69)	RS1/16S473J
R 34	(B,158,50)	RS1/16S223J
R 35	(A,127,49)	RS1/16S104J
R 36	(A,126,59)	RS1/16S101J
R 37	(A,126,61)	RS1/16S101J
R 38	(A,126,62)	RS1/16S101J
R 39	(A,126,63)	RS1/16S101J
R 40	(A,126,46)	RS1/16S470J
R 45	(B,130,56)	RS1/16S104J
R 46	(B,131,62)	RS1/16S104J
R 47	(B,161,47)	RS1/16S104J
R 48	(B,159,65)	RS1/16S104J
R 49	(B,161,65)	RS1/16S104J
R 50	(B,162,65)	RS1/16S104J
R 51	(B,84,25)	RS1/16SS101J
R 52	(B,84,26)	RS1/16SS101J
R 53	(B,84,27)	RS1/16SS101J

A B C D E F

Circuit Symbol and No.		Part No.
R 54	(B,84,28)	RS1/16SS101J
R 55	(B,84,30)	RS1/16SS101J
R 57	(B,84,29)	RS1/16SS101J
R 59	(B,83,31)	RS1/16SS101J
R 60	(B,84,32)	RS1/16SS101J
R 61	(A,60,36)	RS1/16SS0R0J
R 62	(B,84,34)	RS1/16SS101J
R 63	(B,84,33)	RS1/16SS101J
R 64	(B,86,38)	RS1/16SS101J
R 65	(B,84,36)	RS1/16SS101J
R 66	(A,60,41)	RS1/16SS101J
R 67	(A,61,41)	RS1/16SS101J
R 68	(A,62,41)	RS1/16SS101J
R 69	(A,63,41)	RS1/16SS101J
R 70	(A,64,41)	RS1/16SS101J
R 71	(A,65,41)	RS1/16SS101J
R 72	(A,66,41)	RS1/16SS101J
R 73	(A,67,41)	RS1/16SS101J
R 74	(A,68,41)	RS1/16SS101J
R 75	(A,69,41)	RS1/16SS101J
R 76	(A,70,41)	RS1/16SS101J
R 77	(A,71,41)	RS1/16SS101J
R 78	(A,72,41)	RS1/16SS101J
R 79	(A,73,41)	RS1/16SS101J
R 80	(A,74,41)	RS1/16SS101J
R 81	(A,75,41)	RS1/16SS101J
R 82	(A,76,41)	RS1/16SS101J
R 84	(B,84,37)	RS1/16SS562J
R 85	(B,85,31)	RS1/16SS103J
R 87	(B,160,63)	RS1/16S104J
R 88	(B,132,49)	RS1/16S104J
R 89	(B,137,46)	RS1/16S0R0J
R 90	(B,137,45)	RS1/16S0R0J
R 93	(B,135,44)	RS1/16S153J
R 94	(B,138,44)	RS1/16S153J
R 95	(B,134,49)	RS1/16S153J
R 96	(B,134,48)	RS1/16S153J
R 97	(A,123,56)	RS1/16S473J
R 98	(A,159,61)	RS1/16S473J
R 101	(B,107,36)	RS1/16S473J
R 102	(B,107,21)	RS1/16S473J
R 103	(B,105,59)	RS1/16S473J
R 104	(A,136,23)	RS1/16S220J
R 151	(B,131,33)	RS1/16S0R0J
R 152	(B,163,35)	RS1/16S0R0J
R 153	(B,146,44)	RS1/16S471J
R 154	(A,120,56)	RS1/16S473J
R 155	(A,118,56)	RS1/16S473J
R 156	(A,110,66)	RS1/16S473J
R 157	(A,115,66)	RS1/16S473J
R 158	(A,122,52)	RS1/16S473J
R 159	(B,130,57)	RS1/16S473J
R 160	(A,124,61)	RS1/16S473J
R 161	(A,110,69)	RS1/16S103J
R 162	(B,136,57)	RS1/16S473J
R 163	(A,126,58)	RS1/16S560J
R 164	(A,116,66)	RS1/16S473J
R 165	(A,126,70)	RS1/16S473J
R 166	(A,108,69)	RS1/16S473J
R 167	(A,121,64)	RS1/16S473J

Circuit Symbol and No.		Part No.
R 169	(A,125,64)	RS1/16S473J
R 170	(A,111,66)	RS1/16S473J
R 171	(A,114,66)	RS1/16S473J
R 172	(A,112,66)	RS1/16S473J
R 174	(A,126,67)	RS1/16S473J
R 175	(A,126,68)	RS1/16S473J
R 176	(A,126,57)	RS1/16S0R0J
R 177	(A,121,66)	RS1/16S473J
R 178	(A,121,67)	RS1/16S473J
R 179	(A,115,63)	RS1/16S473J
R 180	(A,149,66)	RS1/16S101J
R 181	(A,119,56)	RS1/16S473J
R 182	(A,121,56)	RS1/16S473J
R 183	(A,119,63)	RS1/16S473J
R 184	(A,119,59)	RS1/16S473J
R 185	(A,116,63)	RS1/16S473J
R 186	(A,118,59)	RS1/16S473J
R 187	(A,116,59)	RS1/16S473J
R 188	(A,111,69)	RS1/16S473J
R 189	(A,112,69)	RS1/16S473J
R 190	(A,114,69)	RS1/16S473J
R 191	(B,130,65)	RS1/16S473J
R 192	(A,118,63)	RS1/16S473J
R 193	(A,128,66)	RS1/16S473J
R 194	(A,150,68)	RS1/16S390J
R 196	(A,116,69)	RS1/16S473J
R 201	(A,124,41)	RN1/16SE1502D
R 202	(A,124,40)	RN1/16SE1202D
R 210	(A,103,43)	RS1/16S104J
R 211	(A,102,43)	RS1/16S104J
R 212	(A,94,43)	RS1/16S104J
R 213	(A,93,43)	RS1/16S104J
R 217	(A,125,36)	RS1/16S272J
R 220	(A,126,9)	RS1/16S223J
R 221	(A,126,26)	RS1/16S105J
R 222	(A,126,17)	RS1/16S151J
R 224	(A,84,16)	RS1/16S0R0J
R 225	(A,122,9)	RS1/16S104J
R 226	(A,123,9)	RS1/16S104J
R 227	(A,84,19)	RS1/16S104J
R 228	(A,85,19)	RS1/16S104J
R 229	(B,119,17)	RS1/16S560J
R 230	(A,85,14)	RS1/16S104J
R 232	(A,86,14)	RS1/16S104J
R 237	(B,117,17)	RS1/16S104J
R 238	(B,118,17)	RS1/16S330J
R 240	(A,119,8)	RS1/16S104J
R 301	(A,140,19)	RS1/16S123J
R 302	(A,140,22)	RS1/16S103J
R 303	(A,141,17)	RS1/16S473J
R 320	(A,111,57)	RS1/16S103J
R 329	(A,114,54)	RS1/16SS821J
R 330	(A,115,50)	RS1/16SS221J
R 331	(A,115,52)	RS1/16SS221J
R 332	(A,115,51)	RS1/16SS472J
R 333	(A,103,81)	RS1/16SS222J
R 334	(A,103,59)	RS1/16SS222J
R 335	(A,102,59)	RS1/16SS221J
R 336	(A,101,59)	RS1/16SS221J
R 349	(B,161,44)	RS1/16S473J

Circuit Symbol and No.		Part No.
R 350	(B,152,43)	RS1/16S473J
R 356	(A,114,56)	RS1/16S0R0J
R 360	(B,101,61)	RS1/16SS473J
R 361	(B,101,48)	RS1/16SS473J
R 362	(B,101,60)	RS1/16SS473J
R 363	(B,101,49)	RS1/16SS473J
R 364	(B,101,52)	RS1/16SS473J
R 365	(B,101,51)	RS1/16SS473J
R 366	(B,101,50)	RS1/16SS473J
R 367	(B,103,49)	RS1/16SS473J
R 368	(B,103,51)	RS1/16SS473J
R 369	(B,101,59)	RS1/16SS473J
R 370	(A,93,72)	RS1/8S0R0J
R 601	(A,138,87)	RS1/16S1803D
R 602	(B,51,100)	RS1/16SS473J
R 603	(A,131,91)	RS1/16SS473J
R 604	(A,34,94)	RS1/16SS0R0J
R 606	(A,38,88)	RAB4C681J
R 607	(A,126,86)	RS1/16SS473J
R 608	(B,156,135)	RS1/16S563J
R 609	(B,155,133)	RS1/16S104J
R 610	(B,152,132)	RS1/16S473J
R 611	(B,155,135)	RS1/16S472J
R 614	(A,34,103) (UC)	RS1/16SS473J
R 615	(A,34,102) (EW)	RS1/16SS473J
R 616	(A,46,109)	RS1/16SS681J
R 617	(A,41,86)	RS1/16S0R0J
R 618	(B,40,100)	RS1/16SS473J
R 620	(B,49,97)	RS1/16SS473J
R 622	(A,46,113)	RS1/16SS473J
R 623	(A,48,110)	RAB4C681J
R 625	(A,35,106)	RS1/16S473J
R 626	(A,52,110)	RAB4C681J
R 627	(A,60,95)	RS1/16SS473J
R 628	(A,35,100)	RS1/16SS473J
R 629	(A,58,95)	RS1/16SS473J
R 631	(A,132,84)	RS1/16S681J
R 632	(A,37,107)	RS1/16SS473J
R 633	(A,57,90)	RS1/16SS473J
R 634	(B,54,112)	RS1/16S473J
R 636	(B,56,110)	RS1/16S473J
R 637	(B,12,89)	RS1/16S473J
R 640	(B,52,87)	RS1/16SS101J
R 641	(B,52,88)	RS1/16SS473J
R 642	(A,55,106)	RS1/16SS681J
R 643	(A,57,99)	RS1/16SS681J
R 644	(B,49,99)	RS1/16SS681J
R 645	(A,57,97)	RS1/16SS681J
R 646	(A,57,93)	RAB4C681J
R 648	(A,55,88)	RS1/16SS681J
R 649	(A,54,88)	RS1/16SS681J
R 650	(B,57,91)	RS1/16SS104J
R 651	(B,63,93)	RS1/16S681J
R 653	(A,138,84)	RS1/16S2003F
R 654	(A,34,105)	RS1/16SS473J
R 655	(A,55,109)	RS1/16SS681J
R 657	(A,54,85)	RS1/16S104J
R 658	(A,35,97)	RS1/16SS101J
R 659	(A,51,88)	RAB4C681J
R 660	(A,43,87)	RS1/16SS104J

Circuit Symbol and No.		Part No.
R 661	(A,43,88)	RS1/16SS681J
R 662	(A,42,88)	RS1/16SS681J
R 663	(A,41,88)	RS1/16SS681J
R 664	(B,39,103)	RS1/16SS681J
R 665	(A,38,110)	RAB4C681J
R 666	(A,42,110)	RAB4C681J
R 667	(A,45,109)	RS1/16SS681J
R 668	(A,24,127)	RS1/16S104J
R 670	(B,41,105)	RS1/16SS103J
R 671	(B,41,103)	RS1/16SS103J
R 672	(A,35,110)	RS1/16SS681J
R 673	(B,41,104)	RS1/16SS102J
R 674	(B,41,102)	RS1/16SS102J
R 675	(A,34,99)	RS1/16SS681J
R 676	(A,37,91)	RS1/16SS681J
R 687	(A,51,122)	RS1/16S470J
R 691	(B,157,149)	RS1/16S471J
R 692	(B,159,149)	RS1/16S471J
R 693	(A,171,139)	RS1/16S681J
R 694	(A,167,139)	RS1/16S681J
R 695	(A,170,139)	RS1/16S681J
R 696	(A,165,139)	RS1/16S681J
R 697	(A,168,139)	RS1/16S681J
R 711	(B,63,156)	RS1/16S102J
R 712	(B,66,152)	RS1/16S472J
R 715	(B,64,149)	RS1/16S472J
R 716	(B,60,150)	RS1/16S153J
R 730	(B,74,102)	RS1/16S0R0J
R 732	(B,146,144)	RS1/16S102J
R 733	(B,147,145)	RS1/16S102J
R 734	(A,140,140)	RS1/16S102J
R 735	(A,138,140)	RS1/16S102J
R 736	(A,137,140)	RS1/16S0R0J
R 737	(A,135,140)	RS1/16S102J
R 738	(B,141,148)	RS1/16S681J
R 739	(B,140,148)	RS1/16S681J
R 751	(B,102,93)	RS1/16SS101J
R 752	(B,104,94)	RS1/16SS101J
R 753	(B,106,96)	RS1/16SS101J
R 754	(B,97,95)	RS1/16S222J
R 755	(B,90,96)	RS1/16S222J
R 756	(B,85,97)	RS1/16S103J
R 757	(B,87,101)	RS1/16S272J
R 758	(B,83,100)	RS1/16S272J
R 759	(B,85,101)	RS1/16S0R0J
R 760	(B,81,103)	RS1/16S301J
R 761	(B,83,94)	RS1/16S1000D
R 762	(B,96,108)	RN1/16SE2002D
R 763	(B,93,108)	RS1/16S473J
R 764	(B,104,108)	RS1/16S75R0D
R 765	(B,102,108)	RS1/16S75R0D
R 766	(B,101,108)	RS1/16S75R0D
R 767	(B,99,108)	RS1/16S750J
R 768	(B,84,104)	RS1/16S62R0D
R 769	(B,106,119)	RS1/16S105J
R 770	(B,87,122)	RS1/16S101J
R 772	(B,103,115)	RS1/16S105J
R 773	(A,106,98)	RS1/16S750J
R 774	(B,96,115)	RS1/16S101J
R 776	(A,123,121)	RS1/16S750J

Circuit Symbol and No.		Part No.
R 777	(A,90,110)	RS1/16S750J
R 778	(A,80,107)	RS1/16S681J
R 779	(A,81,114)	RS1/16S302J
R 780	(B,81,111)	RS1/16S102J
R 781	(A,107,81)	RS1/16S0R0J
R 782	(B,85,117)	RS1/16S105J
R 783	(B,91,118)	RS1/16S105J
R 784	(B,102,113)	RS1/16S105J
R 785	(B,83,118)	RS1/16S105J
R 794	(A,75,105)	RS1/16S563J
R 795	(A,77,103)	RS1/16SS102J
R 796	(A,75,103)	RS1/16S563J
R 805	(B,25,28)	RS1/16S151J
R 806	(B,23,26)	RS1/16S151J
R 807	(B,51,35)	RS1/16S470J
R 808	(B,50,35)	RS1/16S103J
R 810	(B,70,32)	RS1/16S0R0J
R 812	(B,53,35)	RS1/16S470J
R 813	(B,56,106)	RS1/16S0R0J
R 814	(A,82,96)	RS1/16S0R0J
R 817	(B,25,30)	RS1/16S103J
R 819	(B,40,85)	RS1/8S181J
R 820	(B,40,83)	RS1/8S181J
R 821	(A,32,83)	RS1/16S103J
R 824	(B,60,34)	RS1/16S0R0J
R 825	(A,89,55)	RS1/10S360J
R 826	(A,89,57)	RS1/10S360J
R 827	(A,89,53)	RS1/16S103J
R 829	(A,119,138)	RS1/16S475J
R 830	(B,9,52)	RS1/16S101J
R 831	(B,8,52)	RS1/16S1600D
R 832	(B,8,54)	RS1/16S5601D
R 833	(B,9,56)	RS1/16S1001D
R 834	(B,9,70)	RS1/16S331J
R 835	(B,15,70)	RS1/16S154J
R 836	(B,31,49)	RS1/16S3300D
R 837	(B,27,48)	RS1/16S101J
R 838	(B,27,49)	RS1/16S3001D
R 839	(B,25,49)	RS1/16S1001D
R 840	(B,26,51)	RS1/16S102J
R 841	(B,26,54)	RS1/16S104J
R 842	(B,31,67)	RS1/16S6800D
R 843	(B,27,67)	RS1/16S5601D
R 844	(B,25,68)	RS1/16S1001D
R 845	(B,27,69)	RS1/16S101J
R 846	(B,26,66)	RS1/16S102J
R 847	(B,66,48)	RS1/16S5600D
R 848	(B,63,48)	RS1/16S2401D
R 849	(B,63,49)	RS1/16S101J
R 850	(B,60,49)	RS1/16S1601D
R 851	(B,61,51)	RS1/16S152J
R 852	(B,66,69)	RS1/16S1200D
R 853	(B,63,69)	RS1/16S1001D
R 854	(B,61,53)	RS1/16S104J
R 855	(B,63,68)	RS1/16S101J
R 856	(B,60,68)	RS1/16S1001D
R 857	(B,61,66)	RS1/16S152J
R 858	(B,21,67)	RS1/16S100J
R 859	(B,16,57)	RS1/16S184J
R 861	(B,9,47)	RS1/10S100J

Circuit Symbol and No.		Part No.
R 865	(B,29,70)	RS1/16S100J
R 866	(B,26,58)	RS1/16S104J
R 867	(B,65,45)	RS1/16S473J
R 868	(B,67,71)	RS1/16S100J
R 869	(B,61,58)	RS1/16S104J
R 870	(B,62,42)	RS1/16S473J
R 873	(B,42,57)	RS1/10S150J
R 874	(B,31,51)	RS1/16S224J
R 875	(B,31,66)	RS1/16S224J
R 876	(B,42,61)	RS1/10S150J
R 877	(B,77,57)	RS1/10S150J
R 878	(B,66,51)	RS1/16S224J
R 879	(B,66,65)	RS1/16S224J
R 880	(B,77,61)	RS1/10S150J
R 884	(B,91,147)	RS1/4S561J
R 885	(B,91,150)	RS1/4S561J
R 886	(B,85,144)	RS1/16S103J
R 891	(B,111,138)	RS1/16S1101D
R 892	(B,109,140)	RS1/16S6800D
R 893	(B,111,129)	RS1/8S102J
R 894	(B,113,140)	RS1/16S471J
R 895	(B,111,132)	RS1/8S102J
R 896	(B,104,129)	RS1/16S103J
R 901	(B,148,122)	RS1/16S224J
R 902	(B,38,122)	RS1/16S473J
R 903	(B,40,116)	RS1/16S223J
R 904	(B,39,116)	RS1/16S223J
R 905	(B,26,82)	RS1/10S472J
R 906	(B,30,82)	RS1/16S223J
R 911	(B,62,119)	RS1/16S474J
R 912	(B,116,140)	RS1/16S472J
R 913	(B,121,138)	RS1/16S102J
R 914	(B,62,111)	RS1/16S473J
R 915	(B,66,119)	RS1/16S473J
R 916	(B,64,119)	RS1/16S473J
R 917	(B,66,98)	RS1/16S0R0J
R 918	(B,67,99)	RS1/16S471J
R 919	(A,112,138)	RS1/16S475J
R 920	(B,68,133)	RS1/16S101J
R 921	(B,62,117)	RS1/16S103J
R 922	(B,87,135)	RS1/16S0R0J
R 925	(A,69,109)	RS1/16S102J
R 926	(A,69,110)	RS1/16S103J
R 927	(B,68,131)	RS1/16S471J
R 928	(B,67,134)	RS1/16S103J
R 929	(B,63,135)	RS1/10S103J
R 936	(B,66,91)	RS1/16S820J
R 937	(B,69,91)	RS1/16S820J
R 938	(B,114,138)	RS1/16S561J
R 939	(B,8,49)	RS1/16S0R0J
R 940	(B,31,47)	RS1/16S0R0J
R 941	(B,33,68)	RS1/16S0R0J
R 942	(B,66,46)	RS1/16S0R0J
R 943	(B,68,68)	RS1/16S0R0J
R 944	(B,26,63)	RS1/16S104J
R 945	(B,61,63)	RS1/16S104J
R 946	(B,37,116)	RS1/16S4701D
R 952	(A,78,95)	RS1/16S473J
R 954	(B,57,149)	RS1/16S103J
R 962	(A,31,95)	RS1/16S103J

Circuit Symbol and No.		Part No.
R 971	(B,17,127)	RS1/16S824J
R 972	(B,16,131)	RS1/16S102J
R 973	(B,21,125)	RS1/16S472J
R 974	(B,18,122)	RS1/8S271J
R 975	(B,18,119)	RS1/8S751J
R 977	(B,30,126)	RS1/16S103J
R 978	(B,32,126)	RS1/16S103J
R 979	(A,8,47)	RS1/10S0R0J
R 981	(A,48,72)	RS1/10S0R0J
R 982	(A,85,71)	RS1/10S0R0J
R 983	(B,14,44)	RS1/10S102J
R 2403	(A,135,123)	RS1/16S102J
R 2404	(B,128,135)	RS1/16S473J
R 2407	(B,128,126)	RS1/16SS473J
R 2409	(B,131,133)	RS1/16S473J
R 2410	(B,131,128)	RS1/16SS473J
R 2411	(B,133,135)	RS1/16S473J
R 2416	(B,132,126)	RS1/16SS473J
R 2417	(B,109,103)	RS1/16S104J
R 2418	(B,110,107)	RS1/16S102J
R 2419	(B,133,123)	RS1/16SS473J
R 2420	(B,133,138)	RS1/16S473J
R 2421	(B,110,109)	RS1/16S473J
R 2422	(B,135,137)	RS1/16S473J
R 2423	(B,135,124)	RS1/16SS473J
R 2424	(B,112,111)	RS1/16S473J
R 2425	(B,136,137)	RS1/16S473J
R 2426	(B,136,124)	RS1/16SS473J
R 2428	(B,116,114)	RS1/16S0R0J
R 2432	(B,119,105)	RS1/16S473J
R 2433	(B,115,105)	RS1/16S473J
R 2438	(A,146,111)	RS1/16S181J
R 2439	(B,122,114)	RS1/16S331J
R 2440	(A,145,109)	RS1/16S181J
R 2441	(A,145,107)	RS1/16S223J
R 2444	(A,145,113)	RS1/16S223J
R 2445	(A,145,104)	RS1/16S102J
R 2446	(A,144,115)	RS1/16S102J
R 2447	(B,123,112)	RS1/16S104J
R 2448	(B,131,114)	RS1/16S473J
R 2449	(B,129,114)	RS1/16S101J
R 2450	(B,131,105)	RS1/16S473J
R 2451	(B,151,92)	RS1/16S152J
R 2452	(B,128,105)	RS1/16S101J
R 2459	(A,127,98) (UC)	RS1/16S471J
	(A,127,98) (EW)	RS1/16S0R0J
R 2460	(B,155,92)	RS1/16S104J
R 2461	(B,147,84)	RS1/16S1202D
R 2462	(B,145,88)	RS1/16S1003D
R 2463	(A,130,97)	RS1/16S0R0J
R 2464	(A,127,114)	RS1/16S0R0J
R 2465	(A,130,117) (UC)	RS1/16SS471J
	(A,130,117) (EW)	RS1/16SS0R0J
R 2470	(A,127,101)	RS1/16S0R0J
R 2471	(A,130,120)	RS1/16S0R0J
R 2472	(B,137,104)	RS1/16S331J
R 2473	(B,137,115)	RS1/16S331J
R 2474	(B,152,82)	RS1/16S101J
R 2475	(B,140,104)	RS1/16S104J
R 2476	(B,140,114)	RS1/16S104J

Circuit Symbol and No.		Part No.
R 2478	(B,143,101)	RS1/16S472J
R 2479	(B,143,103)	RS1/16S472J
R 2480	(B,145,119)	RS1/16S472J
R 2481	(B,143,115)	RS1/16S472J
R 2482	(B,143,106)	RS1/16S472J
R 2483	(B,143,112)	RS1/16S472J
R 2484	(B,146,104)	RS1/16S472J
R 2485	(B,146,114)	RS1/16S472J
R 2486	(B,148,103)	RS1/16S472J
R 2487	(B,149,116)	RS1/16S472J
R 2488	(B,148,101)	RS1/16S471J
R 2489	(B,149,117)	RS1/16S471J
R 2492	(B,24,110)	RS1/16S223J
R 2493	(B,25,114)	RS1/16S473J
R 2496	(B,31,112)	RS1/16S103J
R 2497	(B,23,117)	RS1/4S102J
R 2499	(B,23,123)	RS1/16S103J
R 2500	(B,24,126)	RS1/16S103J
R 2501	(B,29,142)	RS1/16S221J
R 2502	(B,26,139)	RS1/16S102J
R 2503	(B,31,142)	RS1/16S101J
R 2551	(A,14,140)	RS1/16SS101J
R 2552	(A,15,143)	RS1/16SS621J
R 2553	(A,14,145)	RS1/16SS473J
R 2555	(A,10,146)	RS1/16SS361J
R 2556	(B,137,119)	RS1/16S473J
R 2557	(B,137,121)	RS1/16S473J
R 2558	(B,130,120)	RS1/16SS473J
R 2566	(A,128,105)	RS1/16SS101J
R 2567	(A,128,106)	RS1/16SS101J
R 2568	(A,128,107)	RS1/16SS101J
R 2569	(B,133,121)	RS1/16S102J
R 2570	(B,130,116)	RS1/16S0R0J
R 2571	(B,146,103)	RS1/16S224J
R 2572	(B,146,115)	RS1/16S224J
R 2602	(A,161,118)	RS1/8S0R0J
R 2603	(B,157,105)	RS1/16S102J
R 2604	(B,157,107)	RS1/16S102J
R 2606	(B,162,110)	RS1/16S683J
R 2608	(B,161,106)	RS1/16S153J
R 2610	(B,164,104)	RS1/16S0R0J
R 2612	(B,170,103)	RS1/16S752J
R 2613	(B,160,110)	RS1/16S683J
R 2615	(B,168,103)	RS1/16S394J
R 2616	(B,168,100)	RS1/16S101J
R 2617	(B,164,101)	RS1/16S105J
R 2618	(B,162,102)	RS1/16S102J
R 2619	(B,162,100)	RS1/16S472J
R 2620	(B,159,102)	RS1/16S152J
R 2621	(B,159,100)	RS1/16S472J
R 2622	(B,156,102)	RS1/16S472J
R 2623	(B,156,100)	RS1/16S472J
R 2624	(B,161,118)	RS1/16S333J
R 2625	(B,165,116)	RS1/16S683J
R 2626	(B,163,116)	RS1/16S154J
R 2627	(B,162,116)	RS1/16S101J
R 2628	(B,133,115)	RS1/16S103J
R 2629	(B,134,104)	RS1/16S103J
R 2630	(B,166,114)	RS1/16S473J
R 2631	(B,169,113)	RS1/16S473J

Circuit Symbol and No.		Part No.
R 2701	(B,49,30)	RS1/16S222J
R 2702	(B,58,9)	RS1/16S222J
R 2706	(B,53,18)	RS1/16S222J
R 2707	(B,54,23)	RS1/16S102J
R 2708	(B,53,27)	RS1/16S102J
R 2710	(A,46,20)	RS1/16S102J
R 2711	(A,46,25)	RS1/16S102J
R 2712	(B,51,19)	RS1/16S103J
R 2715	(B,35,14)	RS1/16S223J
R 2716	(B,43,26)	RS1/16S223J
R 2717	(B,35,13)	RS1/16S472J
R 2718	(B,39,12)	RS1/16S103J
R 2719	(B,39,14)	RS1/16S223J
R 2720	(B,40,12)	RS1/16S472J
R 2721	(A,36,15)	RS1/16S223J
R 2722	(A,36,14)	RS1/16S472J
R 2723	(A,39,15) (EW)	RS1/16S223J
R 2724	(A,39,14) (EW)	RS1/16S472J
R 2725	(A,43,13) (EW)	RS1/16S103J
R 2726	(A,42,15) (EW)	RS1/16S223J
R 2727	(A,39,23) (UC)	RS1/16S0R0J
R 2729	(A,42,13) (EW)	RS1/16S472J
R 2730	(B,33,102)	RS1/16S471J
R 2731	(B,33,99)	RS1/16S471J
R 2732	(A,38,25)	RS1/16S332J
R 2733	(A,40,25)	RS1/16S332J
R 7021	(A,122,123)	RS1/16S820J
R 7037	(B,145,134)	RS1/16S101J
R 7038	(B,144,136)	RS1/16S101J
R 7039	(B,121,133)	RS1/16S750J
R 7042	(B,114,130)	RS1/16S4701D
R 7043	(B,118,127)	RS1/16S4701D
R 7044	(B,113,124)	RS1/16S101J
R 7045	(B,123,120)	RS1/16S102J
R 7046	(B,115,127)	RS1/16S4701D
R 7047	(B,118,126)	RS1/16S4701D
R 7048	(B,117,116)	RS1/16S563J
R 7049	(B,120,120)	RS1/16S473J

CAPACITORS

C 1	(B,132,19)	CKSRYB104K16
C 2	(B,132,23)	CKSRYB104K16
C 3	(B,132,25)	CKSRYB104K16
C 4	(B,132,30)	CKSRYB104K16
C 5	(B,132,42)	CKSRYB104K16
C 6	(A,152,37)	CKSRYB104K16
C 7	(A,157,45)	CKSRYB104K16
C 8	(A,156,50)	CKSRYB104K16
C 9	(A,156,53)	CKSRYB104K16
C 10	(A,157,56)	CKSRYB104K16
C 11	(A,157,61)	CKSRYB104K16
C 12	(B,136,18) 10μF	CCG1171
C 13	(B,146,26)	CKSRYB104K16
C 14	(B,146,30)	CKSRYB104K16
C 15	(A,148,37)	CKSRYB104K16
C 16	(A,145,37)	CKSRYB104K16
C 17	(A,147,67)	CKSRYB104K16
C 18	(A,145,69)	CCSRCH100D50
C 19	(A,143,69)	CCSRCH100D50
C 20	(B,149,19)	CKSRYB104K16

Circuit Symbol and No.		Part No.
C 21	(B,148,23)	CKSRYB104K16
C 22	(B,148,25)	CKSRYB104K16
C 23	(B,148,30)	CKSRYB104K16
C 24	(B,148,41)	CKSRYB104K16
C 25	(A,141,37)	CKSRYB104K16
C 26	(A,141,66)	CKSRYB104K16
C 27	(B,152,18) 10μF	CCG1171
C 28	(B,157,16)	CKSRYB104K16
C 29	(B,163,28)	CKSRYB104K16
C 30	(A,158,19)	CKSRYF104Z25
C 31	(B,132,59)	CCSRCH9R0D50
C 32	(B,132,63)	CCSRCH9R0D50
C 33	(A,136,37)	CKSRYB104K16
C 35	(A,136,67)	CKSRYB104K16
C 36	(A,130,66)	CKSRYB104K16
C 38	(A,135,33) 10μF	CCG1171
C 39	(A,127,42)	CKSRYB104K16
C 40	(A,127,43)	CKSRYB104K16
C 41	(A,127,51)	CKSRYB104K16
C 42	(B,141,45)	CKSRYB104K16
C 44	(B,137,57)	CKSRYB104K16
C 47	(B,145,66)	CKSRYB104K16
C 49	(B,144,45)	CKSRYB104K16
C 51	(A,149,37)	CKSRYB224K10
C 54	(B,84,38)	CCSRCH121J50
C 55	(B,148,45)	CKSRYB104K16
C 57	(B,152,45)	CKSRYB104K16
C 60	(B,153,66)	CKSRYB104K16
C 63	(B,158,47)	CKSRYB104K16
C 64	(B,158,53)	CKSRYB104K16
C 66	(B,158,55)	CKSRYB104K16
C 67	(B,160,56) 10μF	CCG1171
C 68	(A,131,36) 22μF	CCG1178
C 69	(A,131,34) 22μF	CCG1178
C 70	(A,131,31) 22μF	CCG1178
C 71	(B,130,62)	CKSRYF103Z50
C 72	(B,163,52)	CKSRYF103Z50
C 73	(B,162,52)	CKSRYF104Z25
C 74	(B,158,62)	CKSRYF104Z25
C 75	(A,157,18)	CKSRYF104Z25
C 76	(B,132,28)	CKSRYB103K50
C 77	(B,139,18)	CKSRYB103K50
C 78	(B,146,22)	CKSRYB103K50
C 79	(B,163,31)	CKSRYB103K50
C 80	(B,156,18)	CKSRYB103K50
C 81	(B,148,40)	CKSRYB224K10
C 82	(B,163,23)	CKSRYB103K50
C 96	(B,164,23)	CKSRYB224K10
C 97	(B,164,28)	CKSRYB224K10
C 98	(B,164,31)	CKSRYB224K10
C 101	(A,131,18)	CKSRYB104K16
C 102	(A,135,12)	CKSRYB104K16
C 103	(A,140,26)	CKSRYB104K16
C 104	(A,148,30)	CKSRYB104K16
C 105	(A,156,30)	CKSRYB104K16
C 106	(A,165,30)	CKSRYB104K16
C 107	(A,161,34)	CKSRYB104K16
C 108	(A,161,42)	CKSRYB104K16
C 109	(A,161,51)	CKSRYB104K16
C 110	(B,106,43) 10μF	CCG1171

Circuit Symbol and No.	Part No.
C 111 (B,107,40)	CKSRYB104K16
C 112 (B,107,35)	CKSRYF224Z16
C 113 (B,106,28) 10μF	CCG1171
C 114 (B,107,25)	CKSRYB104K16
C 115 (B,107,20)	CKSRYF224Z16
C 116 (B,119,65)	CKSRYF104Z25
C 117 (B,107,52) 10μF	CCG1171
C 118 (B,107,51)	CKSRYB104K16
C 119 (B,119,50)	CKSRYF104Z25
C 120 (B,109,63)	CKSRYF104Z25
C 121 (B,109,58)	CKSRYF104Z25
C 122 (B,104,39)	CKSRYF104Z25
C 123 (B,106,55)	CKSRYF103Z50
C 124 (B,130,41)	CCSRCH101J50
C 125 (A,166,34)	CKSRYF104Z25
C 126 (A,166,51)	CKSRYF104Z25
C 201 (A,124,39)	CKSRYB104K16
C 202 (A,119,43)	CKSRYB104K16
C 203 (A,118,43)	CKSRYB104K16
C 204 (A,122,38)	CKSRYB104K16
C 205 (A,112,43)	CKSRYB104K16
C 206 (A,106,42)	CKSRYB104K16
C 207 (A,100,43)	CKSRYB104K16
C 208 (A,97,43)	CKSRYB104K16
C 209 (A,88,38)	CKSRYB104K16
C 211 (A,122,35)	CKSRYB104K16
C 213 (A,122,33)	CKSRYB104K16
C 214 (A,124,33)	CKSRYB104K16
C 215 (A,88,36)	CKSRYB104K16
C 216 (A,88,33)	CKSRYB104K16
C 217 (A,88,31)	CKSRYB104K16
C 220 (A,126,34) 10μF	CCG1171
C 221 (A,122,30)	CKSRYB104K16
C 222 (A,122,27)	CKSRYB104K16
C 223 (A,124,9)	CKSRYB224K10
C 224 (A,122,25)	CKSRYB104K16
C 225 (A,124,30)	CKSRYB104K16
C 227 (A,88,30)	CKSRYB104K16
C 228 (A,88,25)	CKSRYB104K16
C 230 (A,127,26)	CCSRCH150J50
C 231 (A,128,17)	CCSRCH120J50
C 232 (A,122,22)	CKSRYB104K16
C 233 (A,122,19)	CKSRYB104K16
C 234 (A,88,21)	CKSRYB104K16
C 235 (A,88,19)	CKSRYB104K16
C 237 (A,123,16)	CKSRYB104K16
C 238 (A,123,14)	CKSRYB104K16
C 239 (A,88,18)	CKSRYB104K16
C 240 (A,88,15)	CKSRYB104K16
C 241 (A,88,13)	CKSRYB104K16
C 242 (A,116,9)	CKSRYB104K16
C 243 (A,113,9)	CKSRYB104K16
C 244 (A,109,9)	CKSRYB104K16
C 245 (A,106,9)	CKSRYB104K16
C 246 (A,103,9)	CKSRYB104K16
C 247 (A,98,9)	CKSRYB104K16
C 248 (A,93,9)	CKSRYB104K16
C 249 (A,88,10) 10μF	CCG1171
C 250 (A,108,44) 10μF	CCG1171
C 251 (A,124,27) 10μF	CCG1171

Circuit Symbol and No.	Part No.
C 252 (A,90,43) 10μF	CCG1171
C 253 (A,126,15)	CKSRYF104Z25
C 255 (A,88,34)	CKSRYB103K50
C 256 (A,88,28)	CKSRYB103K50
C 257 (A,88,27)	CKSRYB103K50
C 258 (A,88,23)	CKSRYB103K50
C 259 (A,88,22)	CKSRYB103K50
C 260 (A,88,16)	CKSRYB103K50
C 261 (A,85,9)	CKSRYB103K50
C 262 (A,84,9)	CKSRYB103K50
C 301 (A,141,22)	CKSRYF104Z25
C 302 (A,149,22)	CKSRYB334K10
C 303 (A,142,13)	CKSRYF104Z25
C 306 (A,120,49)	CKSRYF104Z25
C 323 (A,108,57) 10μF	CCG1171
C 324 (A,97,67)	CKSRYB104K16
C 327 (A,98,69) 10μF	CCG1171
C 328 (A,105,52)	CKSRYB104K16
C 329 (A,103,51) 10μF	CCG1171
C 330 (A,91,61) 10μF	CCG1171
C 331 (A,93,61)	CKSRYB104K16
C 332 (A,93,64)	CKSRYB104K16
C 339 (A,91,65) 10μF	CCG1171
C 341 (A,161,19)	CCSRCH101J50
C 342 (A,141,15)	CKSRYF104Z25
C 344 (B,146,13)	CKSRYF103Z50
C 345 (B,145,13)	CKSRYF104Z25
C 346 (B,131,13)	CKSRYF103Z50
C 347 (B,119,11)	CKSRYF103Z50
C 348 (B,118,9)	CKSRYF104Z25
C 349 (B,97,8)	CKSRYF103Z50
C 350 (A,94,67)	CKSRYB104K16
C 601 (B,54,98)	CKSSYB104K10
C 602 (A,35,98)	CKSSYB104K10
C 603 (B,44,91)	CKSSYB104K10
C 604 (B,46,91)	CKSSYB104K10
C 605 (B,44,95)	CKSSYB104K10
C 606 (A,35,94)	CKSRYB104K16
C 607 (A,37,86)	CKSSYB104K10
C 608 (B,57,96)	CKSSYB104K10
C 609 (B,150,133)	CKSRYB104K16
C 610 (A,124,90)	CKSSYB104K10
C 611 (B,46,93)	CKSSYB104K10
C 612 (A,133,87)	CKSSYB104K10
C 617 (B,56,89)	CKSQYB225K10
C 620 (B,46,104)	CKSRYF104Z25
C 623 (B,50,88)	CKSSYB104K10
C 624 (B,51,104)	CKSRYF104Z25
C 626 (B,51,83)	CKSSYB103K16
C 630 (A,33,98)	CCSRCH101J50
C 636 (A,24,83)	CKSRYF104Z25
C 637 (A,26,98)	CKSRYF104Z25
C 638 (B,18,105)	CKSRYF104Z25
C 639 (A,28,104)	CKSRYF104Z25
C 640 (B,28,99)	CKSRYF104Z25
C 642 (B,17,100)	CKSRYF104Z25
C 643 (B,27,97)	CKSRYF104Z25
C 644 (A,28,121)	CKSRYF104Z25
C 645 (A,28,112) 10μF	CCG1173
C 647 (A,19,113) 10μF	CCG1173

Circuit Symbol and No.	Part No.
C 648 (A,48,121)	CKSRYF104Z25
C 670 (A,39,86)	CKSSYB104K10
C 671 (A,35,99)	CKSSYB104K10
C 672 (A,35,96)	CKSSYB104K10
C 673 (B,41,106)	CKSSYB104K10
C 675 (A,138,86)	CKSSYB104K10
C 691 (B,157,152)	CKSRYB102K50
C 692 (B,157,143)	CKSRYB104K16
C 693 (B,160,146)	CKSQYB105K16
C 694 (B,159,142)	CKSQYB105K16
C 695 (B,167,149)	CKSQYB105K16
C 696 (B,172,152)	CKSRYB102K50
C 697 (B,161,136)	CKSQYB105K16
C 698 (B,164,136)	CKSQYB105K16
C 699 (B,170,135)	CKSRYB102K50
C 700 (B,167,135)	CKSRYB102K50
C 701 (B,169,135)	CKSRYB102K50
C 702 (B,166,135)	CKSRYB102K50
C 706 (B,60,151)	CKSRYB104K25
C 732 (B,154,144)	CKSRYB102K50
C 733 (B,151,144)	CKSRYB102K50
C 734 (B,148,134)	CKSRYB102K50
C 735 (B,142,139)	CKSRYB102K50
C 736 (B,135,148)	CKSRYF104Z25
C 737 (A,131,133)	CKSRYF104Z25
C 738 (A,128,133)	CKSRYF104Z25
C 739 (B,133,152)	CKSRYF104Z25
C 740 (B,135,152)	CKSRYF104Z25
C 741 (B,138,151)	CKSRYF104Z25
C 748 (B,86,89)	CKSSYB103K16
C 749 (B,87,92)	CKSQYB225K10
C 751 (B,104,96)	CKSRYB104K16
C 752 (B,102,96)	CKSRYB104K16
C 753 (B,100,96)	CKSRYB104K16
C 754 (B,99,94)	CCSRCH5R0C50
C 755 (B,94,96)	CCSRCH470J50
C 756 (B,95,96)	CKSRYF104Z25
C 757 (A,93,98)	CEVQW470M16
C 758 (B,92,92)	CKSRYB105K6R3
C 761 (B,95,108)	CCSRCH220J50
C 762 (A,87,96)	CEVW100M16
C 763 (B,92,108)	CKSRYF104Z25
C 764 (A,101,105)	CEVW221M4
C 765 (A,94,105)	CEVW221M4
C 766 (A,86,105)	CEVW221M4
C 767 (A,111,104)	CEVW221M4
C 768 (B,98,108)	CKSRYB105K6R3
C 769 (A,99,96)	CEVQW470M16
C 770 (B,94,93)	CKSRYB104K16
C 771 (A,102,120)	CKSRYB104K16
C 772 (A,99,116)	CEVW101M16
C 773 (B,85,120)	CKSQYB225K10
C 774 (B,92,121)	CKSQYB225K10
C 775 (A,96,121)	CKSRYB103K50
C 776 (B,106,109)	CKSQYB225K10
C 777 (A,86,116)	CEVW101M16
C 778 (A,92,115)	CEVW220M6R3
C 779 (B,83,114)	CKSYF106Z10
C 780 (B,88,109)	CKSQYB225K10
C 781 (B,81,115)	CKSQYB225K10

Circuit Symbol and No.	Part No.
C 782 (A,109,121)	CKSRYB104K16
C 783 (A,106,116)	CEVW101M16
C 784 (A,105,121)	CKSRYB103K50
C 785 (B,104,119)	CKSQYB225K10
C 786 (A,120,116)	CEVW101M16
C 787 (A,114,116)	CEVW220M6R3
C 788 (B,88,105)	CKSRYB104K16
C 790 (B,78,117)	CKSRYB104K16
C 791 (B,77,115)	CKSYF106Z10
C 792 (B,100,122)	CKSRYB104K16
C 793 (B,102,123)	CKSYF106Z10
C 794 (B,108,121)	CKSYF106Z10
C 795 (A,80,103)	CKSQYB225K10
C 796 (A,76,101)	CKSQYB225K10
C 797 (B,88,107) 10μF	CCG1171
C 798 (B,109,118)	CKSRYB104K16
C 799 (B,75,112)	CKSRYB104K16
C 800 (B,96,118)	CKSRYB104K16
C 801 (B,29,31)	CKSRYB103K50
C 802 (A,30,28)	CEVW101M16
C 803 (B,26,80)	CKSQYB225K10
C 804 (A,42,32)	CEVW101M16
C 805 (B,50,37)	CKSRYB103K50
C 806 (B,63,78)	CKSRYB103K50
C 807 (A,65,83)	CEVW470M16
C 808 (B,69,79)	CKSRYF334Z16
C 809 (A,124,134)	CKSRYB103K50
C 810 (A,121,129)	CEVW101M16
C 811 (A,68,72)	CKSRYF104Z25
C 812 (A,44,81)	CKSRYB103K50
C 813 (A,49,82)	CEVW101M16
C 814 (A,32,88)	CEVW101M16
C 815 (A,92,54)	CKSRYB103K50
C 816 (A,97,53)	CEVW101M16
C 817 (B,9,54)	CKSRYB473K50
C 818 (B,12,70)	CKSRYB103K50
C 819 (B,10,68)	CCSRCH101J50
C 820 (B,8,68)	CKSRYB224K16
C 821 (B,31,48)	CKSRYB473K50
C 822 (B,28,52)	CCSRCH101J50
C 823 (B,26,52)	CKSRYB104K16
C 824 (B,31,69)	CKSRYB223K50
C 825 (B,28,65)	CCSRCH101J50
C 826 (B,26,64)	CKSRYB104K16
C 827 (B,66,49)	CKSRYB153K50
C 828 (B,63,51)	CCSRCH101J50
C 829 (B,61,52)	CKSRYB104K16
C 830 (B,66,68)	CKSRYB153K50
C 831 (B,63,65)	CCSRCH101J50
C 832 (B,61,65)	CKSRYB104K25
C 833 (B,13,70)	CCSRCH330J50
C 834 (B,16,70)	CKSRYB105K10
C 835 (B,20,70) 4.7μF	CCG1111
C 836 (B,16,59)	CKSRYF104Z25
C 837 (B,9,64)	CKSYB475K16
C 838 (B,12,59)	CKSRYF474Z16
C 839 (A,15,45) 220μF/10V	CCH1409
C 840 (A,17,61) 10μF	CCG1173
C 841 (B,25,72) 4.7μF	CCG1111
C 842 (B,26,55)	CKSRYB103K50

Circuit Symbol and No.		Part No.
C 843	(B,26,57)	CCSRCH470J50
C 844	(B,26,60)	CKSRYB105K10
C 845	(B,26,62)	CKSRYB103K50
C 846	(B,64,72) 4.7μF	CCG1111
C 847	(B,61,55)	CKSRYB103K50
C 848	(B,61,56)	CCSRCH470J50
C 849	(B,61,59)	CKSRYB105K10
C 850	(B,61,62)	CKSRYB103K50
C 851	(A,20,57) 10μF	CCG1173
C 852	(B,19,49) 4.7μF	CCG1111
C 853	(B,34,53)	CKSRYF474Z16
C 854	(B,31,52)	CKSRYF104Z25
C 855	(B,31,64)	CKSRYF104Z25
C 856	(B,35,64)	CKSRYF474Z16
C 857	(B,27,46)	CKSYB475K16
C 858	(B,69,53)	CKSRYF474Z16
C 859	(B,66,52)	CKSRYF104Z25
C 860	(B,66,66)	CKSRYF104Z25
C 861	(B,69,64)	CKSRYF474Z16
C 862	(B,69,44)	CKSYB475K16
C 863	(B,77,123)	CKSRYF104Z25
C 865	(A,27,54) 10μF	CCG1173
C 868	(B,38,49) 4.7μF	CCG1111
C 869	(A,49,54) 330μF/6.3V	CCH1366
C 870	(B,39,68) 4.7μF	CCG1111
C 871	(A,49,63) 220μF/10V	CCH1409
C 872	(A,61,55) 10μF	CCG1173
C 873	(A,61,52) 10μF	CCG1173
C 875	(B,73,68) 4.7μF	CCG1111
C 876	(A,84,54) 330μF/6.3V	CCH1366
C 877	(B,72,50) 4.7μF	CCG1111
C 878	(A,86,65) 330μF/6.3V	CCH1366
C 879	(A,80,127) 220μF/25V	CCH1356
C 880	(B,87,141)	CKSQYB104K16
C 881	(A,82,137) 2200μF	CCH1405
C 882	(A,106,130)	CEVW101M16
C 883	(B,34,88)	CKSRYB103K50
C 884	(A,74,83)	CEVW101M16
C 885	(A,70,91)	CKSRYF104Z25
C 887	(A,77,88)	CKSRYF104Z25
C 888	(B,108,140)	CKSRYB103K50
C 889	(B,112,140)	CKSRYB103K50
C 890	(B,115,140)	CKSRYF104Z25
C 891	(B,148,121)	CKSRYF104Z25
C 892	(B,69,98)	CKSRYB103K50
C 893	(A,60,103)	CEVW101M16
C 894	(B,61,105)	CKSRYB103K50
C 895	(B,31,88)	CKSRYB104K16
C 896	(A,117,136)	CKSRYB103K50
C 897	(A,114,129)	CEVW101M16
C 898	(A,84,123)	CKSQYB104K16
C 899	(A,88,128) 220μF/25V	CCH1356
C 900	(B,90,133)	CKSQYB104K16
C 901	(B,99,140)	CKSRYB103K50
C 902	(A,98,127)	CEVW101M16
C 903	(A,152,128) 10000μF/16V	CCH1412
C 905	(A,68,103)	CEVW101M16
C 906	(A,58,110)	CKSRYB104K16
C 907	(A,58,112)	CKSRYB473K50
C 908	(B,61,134)	CKSRYF103Z50
C 909	(A,96,134)	CKSRYF104Z25
C 910	(B,59,134)	CKSRYB104K25
C 914	(A,82,145)	CKSRYF104Z25
C 916	(B,54,132)	CKSQYB104K25
C 918	(B,29,26)	CKSRYB103K50
C 919	(B,70,93)	CKSRYB104K25
C 920	(B,118,141)	CKSRYF104Z25
C 950	(B,19,55) 4.7μF	CCG1111
C 951	(B,19,52) 4.7μF	CCG1111
C 953	(B,34,49) 4.7μF	CCG1111
C 954	(A,32,51) 10μF	CCG1173
C 955	(B,35,68) 4.7μF	CCG1111
C 956	(A,32,56) 10μF	CCG1173
C 957	(A,65,56) 10μF	CCG1173
C 958	(A,65,51) 4.7μF	CCG1111
C 959	(A,68,56) 10μF	CCG1173
C 960	(A,68,51) 4.7μF	CCG1111
C 961	(A,82,150)	CKSRYF104Z25
C 962	(A,33,95)	CKSRYB103K50
C 963	(B,54,149)	CKSRYB104K25
C 964	(B,54,150)	CKSRYB105K10
C 971	(B,16,128)	CKSRYB222K50
C 972	(B,17,130)	CKSRYB474K10
C 973	(B,8,122)	CKSQYB105K16
C 974	(A,13,115)	CKSQYB103K50
C 975	(A,19,124)	CEVQW470M16
C 981	(B,74,78)	CKSRYB103K50
C 982	(B,71,78)	CKSRYF104Z25
C 983	(B,75,35)	CKSRYB103K50
C 984	(B,73,35)	CKSRYF104Z25
C 985	(B,64,35)	CKSRYB103K50
C 986	(B,62,35)	CKSRYF104Z25
C 987	(A,92,82)	CKSRYB103K50
C 988	(A,93,82)	CKSRYF104Z25
C 989	(A,92,84)	CKSRYB103K50
C 990	(A,93,84)	CKSRYF104Z25
C 2019	(B,158,103)	CKSRYB104K16
C 2404	(B,117,89)	CKSRYB104K16
C 2407	(B,114,92)	CKSRYB104K16
C 2412	(A,130,128)	CEVW101M16
C 2413	(B,131,136)	CKSRYB105K10
C 2414	(B,130,125)	CKSRYB105K10
C 2418	(B,108,105)	CKSRYB105K6R3
C 2419	(B,133,136)	CCSRCH330J50
C 2420	(B,133,125)	CCSRCH330J50
C 2421	(B,111,105)	CKSRYB103K50
C 2422	(B,139,137)	CCSRCH151J50
C 2423	(B,139,123)	CCSRCH151J50
C 2424	(B,112,108)	CCSRCH221J50
C 2425	(B,136,135)	CCSRCH330J50
C 2426	(B,135,125)	CCSRCH330J50
C 2431	(B,112,113)	CCSRCH471J50
C 2432	(B,138,130)	CKSRYF104Z25
C 2433	(A,138,127)	CEVQW220M16
C 2434	(B,138,134)	CKSRYB105K6R3
C 2435	(B,138,127)	CKSRYB105K6R3
C 2436	(B,119,114)	CKSRYB105K6R3
C 2437	(A,151,106)	CKSRYB102K50
C 2441	(A,144,104)	CKSRYB105K6R3
C 2442	(B,138,125)	CKSRYB105K6R3

Circuit Symbol and No.		Part No.
C 2443	(B,138,133)	CKSRYB105K6R3
C 2444	(A,144,110)	CKSRYB105K6R3
C 2445	(A,147,98)	CEVW470M16
C 2446	(A,145,102)	CKSRYB105K6R3
C 2447	(A,148,102)	CKSRYB104K16
C 2448	(A,143,112)	CKSRYB105K6R3
C 2449	(B,126,111)	CKSRYB105K6R3
C 2450	(A,118,108)	CEVQW220M16
C 2451	(B,132,109)	CKSRYF104Z25
C 2452	(B,146,92)	CKSRYB105K6R3
C 2453	(A,141,97)	CKSYB475K16
C 2456	(A,141,117)	CKSYB475K16
C 2457	(A,139,97)	CKSYB475K16
C 2458	(A,139,117)	CKSYB475K16
C 2459	(A,136,97)	CKSYB475K16
C 2460	(A,136,117)	CKSYB475K16
C 2461	(B,156,92)	CKSRYB332K50
C 2462	(A,133,97)	CKSYB475K16
C 2463	(A,133,117)	CKSYB475K16
C 2464	(B,153,92)	CKSRYB474K10
C 2465	(B,150,89)	CKSRYB104K16
C 2466	(A,127,109)	CKSRYB104K16
C 2467	(A,127,111)	CKSRYB104K16
C 2468	(A,127,112)	CCSRCH100D50
C 2469	(B,150,86)	CKSRYB104K16
C 2470	(A,127,95)	CCSRCH100D50
C 2471	(B,147,83)	CKSRYB104K16
C 2472	(A,130,115)	CCSRCH100D50
C 2473	(B,148,86)	CKSRYB104K16
C 2474	(A,127,97)	CCSRCH100D50
C 2475	(A,129,118)	CCSRCH100D50
C 2476	(A,127,100)	CCSRCH100D50
C 2477	(B,136,104)	CKSRYB105K6R3
C 2478	(B,136,115)	CKSRYB105K6R3
C 2479	(A,158,88)	CEVW101M16
C 2480	(A,124,102)	CEVW100M16
C 2481	(A,150,88)	CEVW101M16
C 2482	(B,155,82)	CKSRYB222K50
C 2483	(B,137,100) 10μF	CCG1138
C 2484	(B,140,103)	CKSRYB105K6R3
C 2485	(B,141,118) 10μF	CCG1138
C 2486	(B,140,115)	CKSRYB105K6R3
C 2487	(B,143,104)	CCSRCH101J50
C 2488	(B,143,114)	CCSRCH101J50
C 2489	(B,133,100)	CKSRYB104K16
C 2490	(B,148,104)	CCSRCH101J50
C 2491	(B,149,114)	CCSRCH101J50
C 2492	(B,151,108)	CKSRYB104K16
C 2493	(A,154,104)	CEVW100M16
C 2494	(B,34,125)	CKSRYB105K10
C 2495	(B,29,140)	CKSRYB105K10
C 2496	(B,34,127)	CKSRYB105K10
C 2497	(B,31,140)	CKSRYB105K10
C 2498	(B,30,138)	CKSRYB105K10
C 2499	(B,38,126)	CKSRYB105K10
C 2500	(B,33,138)	CKSRYB105K10
C 2501	(B,37,126)	CKSRYB105K10
C 2503	(A,65,125) 2200μF/16V	CCH1405
C 2504	(A,72,131) 10μF	CCG1138
C 2505	(B,42,139)	CKSRYB104K25
C 2506	(A,18,130)	CEVW100M16
C 2507	(B,39,141)	CKSYB475K16
C 2508	(B,39,139)	CKSYB475K16
C 2509	(A,52,130)	CEVW330M25
C 2510	(A,46,138)	CKSRYB473K50
C 2519	(B,170,117)	CKSRYF104Z25
C 2552	(A,13,143)	CCSRCH150J50
C 2553	(A,7,143)	CKSRYB104K16
C 2554	(A,10,143)	CKSQYB225K10
C 2555	(A,12,145)	CKSSYB104K10
C 2556	(B,131,120)	CKSSYB104K10
C 2557	(B,130,118)	CKSSYB103K16
C 2558	(B,137,118)	CKSRYB103K50
C 2603	(A,162,109)	CEVQW220M16
C 2604	(B,159,109)	CKSRYB473K50
C 2605	(B,161,108)	CKSRYB473K50
C 2606	(B,165,104)	CKSRYB333K50
C 2607	(B,168,102)	CKSRYB105K6R3
C 2608	(B,168,105)	CCSRCH471J50
C 2609	(B,169,109)	CKSRYF104Z25
C 2610	(A,167,109)	CEVQW220M16
C 2611	(B,167,100)	CKSRYB105K6R3
C 2612	(B,159,118)	CKSRYB474K10
C 2613	(B,167,117)	CCSRCH471J50
C 2614	(B,164,114)	CCSRCH680J50
C 2615	(B,159,117)	CKSRYB105K6R3
C 2616	(B,167,115)	CKSRYB105K6R3
C 2617	(B,121,95)	CKSRYB104K16
C 2618	(B,119,111)	CKSRYF104Z25
C 2621	(B,32,121)	CKSSYF104Z16
C 2637	(B,115,103)	CKSQYB105K10
C 2704	(B,33,13)	CKSRYB104K16
C 2705	(B,40,26)	CKSRYB103K50
C 2706	(B,36,20)	CKSRYB104K16
C 2707	(B,42,30)	CKSRYF104Z25
C 2708	(B,40,20)	CKSRYB104K16
C 2709	(A,36,20)	CKSRYB104K16
C 2710	(A,39,20) (EW)	CKSRB104K16
C 2711	(B,40,88)	CKSRYF104Z25
C 2712	(B,36,103)	CKSRYB102K50
C 2713	(A,43,20) (EW)	CKSRB104K16
C 7007	(A,68,114)	CKSRYF104Z25
C 7014	(B,117,132)	CKSYB106K6R3
C 7015	(B,121,129)	CKSYB106K6R3
C 7017	(B,115,126)	CCSRCK1R0C50
C 7018	(B,121,120)	CKSRYB105K10
C 7019	(B,112,120)	CKSYF106Z10
C 7020	(B,114,119)	CKSRYB104K16
C 7021	(A,125,123)	CCSRCH102J50
C 7078	(B,85,114)	CKSRYB104K16
C 7092	(B,91,115)	CKSRYB104K16

Mother Tuner Unit
Consists of
Relay PCB
Mother PCB
Connector PCB

JKL

Unit Number:CWM9946(AVIC-N2/XU/UC)

Unit Name:Mother Tuner Unit

MISCELLANEOUS

Circuit Symbol and No.		Part No.
IC 1001	(A,129,43) IC	NJM2137V
IC 1002	(B,106,27) IC	TA2050FS1
IC 1101	(A,105,116) IC	HA12240FP
IC 1102	(A,113,109) IC	TA2050FS1
IC 1201	(A,31,118) IC	NJM2137V
IC 1301	(B,92,25) IC	TA2050FS1
IC 1302	(A,77,21) IC	NJM2137V
IC 1352	(A,61,11) IC	NJM2137V
IC 1401	(A,53,79) IC	NJM2391DL1-33
IC 1402	(A,51,107) IC	NJM4558E
IC 1501	(A,76,36) IC	CXA2069Q
IC 1551	(A,97,43) IC	NJM2561F1
IC 1552	(A,71,58) IC	NJM2561F1
IC 1601	(A,83,81) IC	TC7SH04FUS1
IC 1603	(A,83,100) IC	PE5412B
IC 1604	(A,94,87) IC	TC7SH08FUS1
IC 1605	(A,100,90) IC	TC7SH08FUS1
IC 1607	(A,92,117) IC	TC7SH08FUS1
IC 1608	(A,71,95) IC	TC7SH04FUS1
IC 1821	(A,18,123) IC	NJM2904M
IC 1871	(A,146,80) IC	S-812C33AMC-C2N
IC 1872	(A,153,88) IC	S-L2980A50MC-C7J
IC 1901	(A,166,84) IC	NJM2391DL1-33
IC 1902	(B,164,61) IC	M5237ML
Q 1101	(A,121,108) Transistor	DTC124EU
Q 1102	(A,120,115) Transistor	2SA1576
Q 1201	(A,135,41) Transistor	2SA1037K
Q 1202	(A,136,45) Transistor	2SC2412K
Q 1551	(B,80,44) Transistor	2SA1576
Q 1552	(B,67,39) Transistor	2SA1576
Q 1555	(B,73,51) Transistor	2SC2412K
Q 1556	(B,71,46) Transistor	2SC2412K
Q 1557	(A,76,57) Transistor	2SC2412K
Q 1558	(B,92,48) Transistor	2SC2412K
Q 1559	(B,63,50) Transistor	FMG12
Q 1581	(B,59,85) Transistor	2SA1037K
Q 1582	(B,59,91) Transistor	2SC4081
Q 1583	(B,65,88) Transistor	2SC4081
Q 1601	(B,114,101) Transistor	2SC2412K
Q 1607	(A,68,109) Transistor	2SC4081
Q 1821	(B,16,118) Transistor	DTC114EU
Q 1822	(B,21,134) Transistor	DTC114WK
Q 1871	(B,150,86) Transistor	DTC114EU
Q 1872	(B,146,83) Transistor	2SA1037K
Q 1881	(A,9,126) Transistor	DTC114EU
Q 1901	(A,78,77) Transistor	2SA1036K
Q 1902	(B,136,42) Transistor	2SA1036K
Q 1903	(A,81,71) Transistor	DTC114EK
Q 1904	(B,146,41) Transistor	DTC114EK
Q 1905	(B,165,34) Transistor	2SB1260
Q 1906	(B,158,39) Transistor	DTC114EK
Q 1907	(A,172,61) Transistor	2SB1629
Q 1908	(A,173,42) Transistor	2SD2396
Q 1909	(A,173,72) Transistor	2SD2396
Q 1951	(B,111,85) Transistor	2SD2098
Q 1952	(B,109,45) Transistor	2SD2098
Q 2801	(A,90,25) Transistor	2SC4081
Q 2831	(B,39,12) Transistor	DTC323TU
Q 2832	(B,41,8) Transistor	DTC323TU
Q 2833	(B,32,8) Transistor	DTC323TU
Q 2844	(B,34,12) Transistor	DTC323TU
Q 2845	(B,29,12) Transistor	DTC323TU
Q 2846	(B,27,8) Transistor	DTC323TU
Q 2886	(B,87,26) Transistor	2SC4081
D 1001	(B,138,10) Diode	UDZS6R8(B)
D 1002	(B,138,17) Diode	UDZS6R8(B)
D 1003	(B,140,11) Diode	UDZS6R8(B)
D 1004	(B,135,15) Diode	UDZS6R8(B)
D 1005	(B,136,9) Diode	UDZS6R8(B)
D 1006	(B,140,17) Diode	UDZS6R8(B)
D 1007	(B,133,15) Diode	UDZS6R8(B)
D 1008	(B,133,8) Diode	UDZS6R8(B)
D 1009	(B,131,15) Diode	UDZS6R8(B)
D 1010	(B,131,7) Diode	UDZS6R8(B)
D 1011	(B,129,15) Diode	UDZS6R8(B)
D 1012	(B,131,23) Diode	UMZ6R8N
D 1013	(B,135,22) Diode	MA153
D 1014	(B,126,23) Diode	UMZ6R8N
D 1015	(B,123,22) Diode	UMZ6R8N
D 1016	(B,126,16) Diode	UDZS6R8(B)
D 1017	(B,126,9) Diode	UDZS6R8(B)
D 1018	(B,124,17) Diode	UDZS6R8(B)
D 1019	(B,122,8) Diode	UMZ6R8N
D 1020	(B,118,9) Diode	UMZ6R8N
D 1021	(B,121,18) Diode	UMZ6R8N
D 1022	(B,117,17) Diode	UMZ6R8N
D 1023	(B,128,9) Diode	UDZS6R8(B)
D 1101	(B,116,119) Diode	UMZ6R8N
D 1102	(B,115,132) Diode	UMZ6R8N
D 1103	(B,105,129) Diode	DAN202U
D 1104	(B,105,133) Diode	DAP202U
D 1201	(A,138,35) Diode	1SS355
D 1202	(A,137,49) Diode	1SS355
D 1203	(A,54,124) Diode	HZU12(B2)
D 1204	(A,56,124) Diode	HZU12(B2)
D 1205	(A,43,124) Diode	HZU12(B2)
D 1206	(A,49,124) Diode	HZU12(B2)
D 1207	(A,32,131) Diode	UMZ6R8N
D 1208	(A,35,131) Diode	UMZ6R8N
D 1301	(B,108,19) Diode	UMZ6R8N
D 1302	(B,93,14) Diode	UMZ6R8N
D 1303	(B,70,12) Diode	UMZ6R8N
D 1304	(B,70,15) Diode	UMZ6R8N
D 1353	(B,50,8) Diode	UMZ6R8N
D 1354	(B,48,16) Diode	UMZ6R8N
D 1401	(A,51,73) Diode	1SR154-400
D 1402	(A,51,70) Diode	1SR154-400
D 1403	(A,52,66) Diode	1SR154-400
D 1551	(B,101,46) Diode	MA153
D 1552	(B,69,61) Diode	MA153
D 1553	(A,60,54) Diode	DAP202U
D 1580	(A,70,89) Diode	MA111
D 1581	(B,64,92) Diode	DAN202U
D 1582	(B,67,84) Diode	UDZS8R2(B)
D 1602	(B,110,102) Diode	DAN202U
D 1821	(A,9,121) Diode	S1G-6904G2P
D 1822	(A,12,125) Diode	UDZS18(B)
D 1823	(A,14,125) Diode	UDZS18(B)
D 1824	(A,19,115) Diode	1SS355
D 1871	(B,140,87) Diode	UDZS5R6(B)
D 1881	(B,10,115) Diode	UDZS18(B)
D 1882	(A,58,116) Diode	1SS355
D 1883	(B,10,126) Diode	UDZS6R8(B)
D 1884	(B,142,110) Diode	RB500V-40
D 1902	(B,168,42) Diode	HZU9R1(B3)
D 1903	(B,168,71) Diode	UDZS5R6(B)
D 1950	(B,105,84) Diode	UDZS13(B)
D 1951	(B,114,44) Diode	UDZS5R6(B)
D 2801	(B,26,33) Diode	UDZS6R8(B)
D 2802	(B,22,35) Diode	UDZS6R8(B)
D 2811	(B,96,36) Diode	UDZS10(B)
D 2812	(B,102,36) Diode	UDZS10(B)
D 2813	(B,76,28) Diode	UDZS5R6(B)
D 2814	(B,76,26) Diode	UDZS5R6(B)
D 2886	(B,73,35) Diode	S1G-6904G2P
D 2887	(B,73,32) Diode	S1G-6904G2P
ZNR1401	(A,18,34) Surge Protector	RCCA-201Q31UA-PI
L 1001	(A,141,33) Inductor	CTF1334
L 1002	(A,142,33) Inductor	CTF1334
L 1003	(A,142,36) Inductor	CTF1334
L 1004	(A,143,36) Inductor	CTF1334
L 1005	(A,133,31) Inductor	CTF1306
L 1006	(A,135,31) Inductor	CTF1306
L 1007	(A,136,31) Inductor	CTF1306
L 1008	(A,136,33) Inductor	CTF1306
L 1009	(A,116,21) Inductor	CTF1306
L 1010	(A,118,21) Inductor	CTF1306
L 1011	(A,118,25) Inductor	CTF1306
L 1012	(A,117,28) Inductor	CTF1306
L 1013	(A,121,30) Inductor	CTF1334
L 1014	(A,122,30) Inductor	CTF1334
L 1015	(A,124,30) Inductor	CTF1334
L 1016	(A,123,22) Inductor	CTF1382
L 1017	(A,127,21) Inductor	CTF1334
L 1018	(A,127,26) Inductor	CTF1382
L 1019	(A,128,28) Inductor	CTF1382
L 1020	(A,130,29) Inductor	CTF1334
L 1021	(A,132,34) Inductor	CTF1334
L 1022	(A,128,21) Inductor	CTF1334
L 1026	(B,122,41) Inductor	CTF1399
L 1101	(A,105,108) Inductor	LCYA2R2J2520
L 1102	(A,112,118) Inductor	CTF1334
L 1103	(A,113,118) Inductor	CTF1334
L 1104	(A,117,118) Inductor	CTF1334
L 1105	(A,115,118) Inductor	CTF1334
L 1201	(A,35,113) Inductor	CTF1399
L 1301	(B,82,26) Inductor	CTF1399
L 1302	(B,90,18) Inductor	CTF1334
L 1303	(B,86,12) Inductor	CTF1334
L 1304	(B,103,18) Inductor	CTF1334
L 1305	(B,101,12) Inductor	CTF1334
L 1351	(A,67,21) Inductor	CTF1399
L 1401	(B,40,45) Inductor	LCTAW4R7J2520
L 1403	(B,51,79) Inductor	LCTAW1R0J2520
L 1405	(A,56,92) Inductor	LCYA1R0J2520
L 1406	(B,59,61) Inductor	LCTAW1R0J2520
L 1501	(A,81,58) Inductor	LCYA100J2520
L 1551	(B,82,55) Inductor	LCTAW101J2520
L 1552	(B,90,52) Inductor	LCTAW100J2520
L 1553	(B,103,41) Inductor	LCTAW100J2520
L 1554	(B,75,62) Inductor	LCTAW100J2520
L 1555	(B,83,58) Inductor	LCTAW100J2520
L 1601	(A,89,80) Inductor	CTF1379
L 1602	(B,71,95) Inductor	CTF1379
L 1603	(A,98,95) Inductor	CTF1379
L 1604	(A,69,105) Inductor	CTF1379
L 1766	(A,80,115) Inductor	CTF1379
L 1821	(A,8,117) Inductor	CTF1306
L 1841	(A,146,114) Inductor	CTF1334
L 1842	(B,148,109) Inductor	CTF1334
L 1849	(B,156,116) Inductor	CTF1393
L 1850	(A,161,113) Inductor	CTF1334
L 1851	(B,150,100) Inductor	CTF1334
L 1852	(B,140,108) Inductor	CTF1306
L 1853	(B,132,100) Inductor	CTF1306
L 1861	(B,170,106) Inductor	CTF1334
L 1862	(B,170,96) Inductor	CTF1334
L 1871	(B,152,79) Inductor	CTF1334
L 1872	(A,166,90) Inductor	CTF1393
L 1873	(B,158,88) Inductor	CTF1393
L 1881	(B,10,117) Inductor	CTF1306
L 2811	(B,98,34) Inductor	CTF1557
L 2812	(B,99,22) Inductor	CTF1557
L 2813	(B,42,19) Inductor	CTF1334
L 2814	(B,41,17) Inductor	CTF1334
L 2831	(A,36,16) Inductor	CTF1306
L 2832	(A,20,22) Inductor	CTF1306
L 2833	(A,23,21) Inductor	CTF1306
L 2834	(A,33,20) Inductor	CTF1306
L 2835	(A,23,23) Inductor	CTF1306
L 2836	(A,21,21) Inductor	CTF1306
L 2851	(B,71,21) Inductor	CTF1334
L 2852	(B,75,21) Inductor	CTF1334
L 2853	(B,79,20) Inductor	CTF1334
L 2854	(B,71,19) Inductor	CTF1334
L 2855	(B,75,19) Inductor	CTF1334
L 2856	(B,79,18) Inductor	CTF1334
L 2857	(B,88,11) Inductor	CTF1334
L 2859	(A,93,17) Inductor	CTF1334
L 2861	(B,75,23) Inductor	CTF1334
L 2862	(B,82,28) Inductor	CTF1334
L 2886	(B,82,25) Inductor	CTF1295
X 1601	(A,86,114) Radiator 12.58MHz	CSS1601
VR1551	(A,96,48) Semi-fixed 10kΩ(B)	CCP1448
⚠FU1202	(A,44,118) Fuse 4A	CEK1288
⚠FU1703	(A,86,122) Fuse 4A	CEK1288
⚠FU1704	(A,68,124) Fuse 4A	CEK1288
⚠FU1951	(A,118,87) Fuse 2A	CEK1284
⚠FU2801	(A,24,20) Fuse 5A	CEK1289
Y 1401	(A,46,44) FM/AM Tuner Unit	CWE1651
GY1863	(A,169,113) Sensor	CSX1078
GY1865	(A,167,101) Sensor	CSX1074
EF1001	(A,139,32) EMI Filter	CCG1082
EF1201	(A,30,131) EMI Filter	CCG1067

Circuit Symbol and No.		Part No.
EF1301	(A,74,17) EMI Filter	CCG1067
EF1351	(A,52,10) EMI Filter	CCG1067
EF1701	(A,91,125) EMI Filter	CCG1067
EF1901	(A,157,29) EMI Filter	CCG1172
EF1902	(A,146,39) EMI Filter	CCG1172
EF1903	(A,152,39) EMI Filter	CCG1172
EF2801	(A,70,32) EMI Filter	CCG1067

RESISTORS

Circuit Symbol and No.		Part No.
R 1001	(B,127,31)	RS1/16S750J
R 1004	(A,128,37)	RS1/16S472J
R 1005	(A,129,38)	RS1/16S472J
R 1006	(A,126,43)	RS1/16S512J
R 1007	(A,125,42)	RS1/16S102J
R 1008	(A,123,38)	RS1/16S101J
R 1009	(A,125,39)	RS1/16S512J
R 1010	(A,111,32)	RS1/16S101J
R 1011	(A,111,28)	RS1/16S101J
R 1012	(A,109,30)	RS1/16S223J
R 1013	(A,109,29)	RS1/16S223J
R 1014	(A,109,32)	RS1/16S102J
R 1015	(A,109,27)	RS1/16S102J
R 1016	(A,129,48)	RS1/16S563J
R 1017	(A,126,49)	RS1/16S473J
R 1102	(A,101,112)	RS1/16S102J
R 1104	(A,104,123)	RS1/10S101J
R 1105	(A,102,123)	RS1/10S101J
R 1106	(A,103,126)	RS1/10S620J
R 1107	(A,113,115)	RS1/16S102J
R 1108	(A,115,115)	RS1/16S102J
R 1109	(B,112,116)	RS1/16S223J
R 1110	(B,116,116)	RS1/16S223J
R 1111	(A,111,115)	RS1/16S101J
R 1112	(A,117,115)	RS1/16S101J
R 1113	(A,120,112)	RS1/16S332J
R 1114	(A,120,111)	RS1/16S682J
R 1115	(A,120,119)	RS1/10S222J
R 1118	(A,101,111)	RS1/16S0R0J
R 1119	(A,101,109)	RS1/16S0R0J
R 1201	(A,135,36)	RS1/16S473J
R 1202	(A,29,117)	RS1/16S563J
R 1203	(A,29,114)	RS1/16S473J
R 1204	(A,136,38)	RS1/16S473J
R 1205	(A,138,42)	RS1/16S473J
R 1206	(A,138,39)	RS1/16S473J
R 1207	(A,136,48)	RS1/16S473J
R 1208	(B,29,118)	RS1/16S512J
R 1209	(B,31,118)	RS1/16S102J
R 1210	(B,35,119)	RS1/16S101J
R 1211	(B,33,121)	RS1/16S512J
R 1212	(A,31,123)	RS1/16S472J
R 1213	(A,34,123)	RS1/16S472J
R 1214	(B,55,126)	RS1/16S0R0J
R 1215	(B,57,127)	RS1/16S0R0J
R 1216	(B,43,124)	RS1/16S0R0J
R 1217	(B,49,124)	RS1/16S0R0J
R 1218	(B,30,129)	RS1/16S103J
R 1219	(B,32,133)	RS1/16S103J
R 1220	(A,33,128)	RS1/16S750J

Circuit Symbol and No.		Part No.
R 1301	(A,82,21)	RS1/16S563J
R 1302	(A,80,18)	RS1/16S473J
R 1303	(A,85,17)	RS1/16S102J
R 1304	(A,99,17)	RS1/16S102J
R 1305	(B,86,16)	RS1/16S223J
R 1306	(B,100,15)	RS1/16S223J
R 1307	(B,88,18)	RS1/16S101J
R 1308	(B,100,19)	RS1/16S101J
R 1309	(B,77,20)	RS1/16S512J
R 1310	(B,81,20)	RS1/16S102J
R 1311	(A,75,25)	RS1/16S101J
R 1312	(B,78,23)	RS1/16S512J
R 1313	(A,72,20)	RS1/16S472J
R 1314	(A,72,23)	RS1/16S472J
R 1315	(A,72,17)	RS1/16S103J
R 1316	(B,78,14)	RS1/16S103J
R 1317	(B,75,17)	RS1/16S750J
R 1351	(A,65,11)	RS1/16S563J
R 1352	(A,66,8)	RS1/16S473J
R 1357	(B,61,10)	RS1/16S512J
R 1358	(B,65,10)	RS1/16S102J
R 1359	(A,58,15)	RS1/16S101J
R 1360	(B,62,13)	RS1/16S512J
R 1363	(A,56,10)	RS1/16S472J
R 1364	(A,56,13)	RS1/16S472J
R 1365	(B,52,10)	RS1/16S103J
R 1366	(B,51,12)	RS1/16S103J
R 1367	(A,53,12)	RS1/16S750J
R 1402	(B,47,110)	RS1/16S0R0J
R 1403	(B,49,102)	RS1/16S0R0J
R 1404	(B,49,59)	RS1/16S681J
R 1405	(B,49,56)	RS1/16S681J
R 1407	(A,56,106)	RS1/16S103J
R 1408	(A,58,106)	RS1/16S103J
R 1409	(A,52,111)	RS1/16S273J
R 1410	(B,53,102)	RS1/16S273J
R 1412	(A,56,110)	RS1/16S183J
R 1413	(A,56,108)	RS1/16S183J
R 1415	(B,51,107)	RS1/16S753J
R 1416	(B,53,109)	RS1/16S753J
R 1426	(B,49,81)	RS1/16S681J
R 1428	(B,49,54)	RS1/16S681J
R 1429	(B,49,64)	RS1/16S681J
R 1431	(B,49,61)	RS1/16S681J
R 1434	(B,41,48)	RS1/4S0R0J
R 1501	(A,63,35)	RS1/16S0R0J
R 1502	(A,61,34)	RS1/16S0R0J
R 1505	(A,91,30)	RS1/16S562J
R 1506	(A,88,26)	RS1/16S562J
R 1507	(A,91,34)	RS1/16S562J
R 1508	(A,91,35)	RS1/16S562J
R 1509	(A,91,40)	RS1/16S562J
R 1510	(A,91,41)	RS1/16S562J
R 1511	(A,85,47)	RS1/16S101J
R 1512	(A,86,47)	RS1/16S101J
R 1551	(B,69,34)	RS1/16S0R0J
R 1552	(B,69,32)	RS1/16S0R0J
R 1553	(B,76,44)	RS1/16S182J
R 1554	(B,72,42)	RS1/16S182J
R 1555	(B,78,47)	RS1/16S102J

Circuit Symbol and No.		Part No.
R 1556	(B,70,39)	RS1/16S102J
R 1557	(B,91,45)	RS1/16S103J
R 1558	(B,76,57)	RS1/16S123J
R 1559	(B,97,50)	RS1/16S123J
R 1560	(B,72,58)	RS1/16S103J
R 1561	(B,72,35)	RS1/16S473J
R 1562	(B,72,31)	RS1/16S473J
R 1563	(B,69,50)	RS1/16S471J
R 1564	(B,69,47)	RS1/16S471J
R 1565	(B,72,56)	RS1/16S471J
R 1566	(B,98,47)	RS1/16S471J
R 1567	(A,64,53)	RS1/16S821J
R 1568	(A,69,53)	RS1/16S821J
R 1569	(B,75,34)	RS1/16S821J
R 1570	(B,75,32)	RS1/16S821J
R 1571	(B,70,53)	RS1/16S104J
R 1572	(B,65,53)	RS1/16S104J
R 1573	(A,108,39)	RS1/16S750J
R 1574	(A,67,55)	RS1/16S105J
R 1575	(A,65,68)	RS1/16S750J
R 1576	(A,70,68)	RS1/16S0R0J
R 1580	(B,98,43)	RS1/16S105J
R 1581	(B,55,85)	RS1/4S821J
R 1582	(B,56,90)	RS1/16S223J
R 1583	(B,62,89)	RS1/16S473J
R 1584	(B,59,89)	RS1/16S223J
R 1585	(B,70,90)	RS1/16S563J
R 1586	(B,69,86)	RS1/16S223J
R 1587	(B,62,84)	RS1/16S473J
R 1588	(A,70,86)	RS1/16S101J
R 1601	(B,115,105)	RS1/16S272J
R 1602	(B,117,101)	RS1/16S101J
R 1603	(B,107,102)	RS1/16S333J
R 1604	(B,113,105)	RS1/16S473J
R 1607	(A,90,81)	RS1/16S104J
R 1610	(A,94,83)	RS1/16S681J
R 1611	(A,100,87)	RS1/16S681J
R 1612	(A,84,85)	RAB4C681J
R 1613	(B,97,109)	RS1/16S472J
R 1614	(A,94,89)	RS1/16S681J
R 1615	(A,80,86)	RS1/16S473J
R 1617	(A,73,90)	RS1/16S681J
R 1618	(A,96,92)	RAB4C681J
R 1619	(A,98,88)	RS1/16S104J
R 1621	(A,75,82)	RS1/16S470J
R 1622	(A,76,82)	RS1/16S470J
R 1623	(A,76,86)	RS1/16S103J
R 1624	(A,76,84)	RS1/16S103J
R 1625	(A,96,98)	RAB4C681J
R 1626	(A,72,99)	RAB4C681J
R 1627	(B,70,92)	RS1/16S563J
R 1629	(A,96,102)	RAB4C681J
R 1630	(A,96,104)	RS1/16S473J
R 1631	(A,97,107)	RAB4C681J
R 1632	(A,67,112)	RS1/16S473J
R 1633	(A,67,107)	RS1/16S473J
R 1634	(A,72,109)	RAB4C681J
R 1635	(A,97,111)	RAB4C681J
R 1636	(A,92,122)	RS1/16S473J
R 1637	(B,97,118)	RS1/16S473J

Circuit Symbol and No.		Part No.
R 1638	(B,71,97)	RS1/16S104J
R 1640	(B,79,109)	RS1/16S681J
R 1641	(A,92,114)	RS1/16S681J
R 1642	(B,86,111)	RS1/16S473J
R 1643	(B,72,108)	RS1/16S473J
R 1644	(B,80,111)	RS1/16S473J
R 1647	(B,76,109)	RS1/16S473J
R 1651	(B,77,116)	RS1/16S473J
R 1652	(B,79,116)	RS1/16S473J
R 1657	(B,72,110)	RS1/16S473J
R 1658	(B,72,112)	RS1/16S473J
R 1659	(A,82,79)	RS1/16S473J
R 1661	(A,90,85)	RS1/16S681J
R 1662	(A,87,85)	RS1/16S681J
R 1663	(B,88,88)	RS1/16S681J
R 1664	(A,88,85)	RS1/16S681J
R 1821	(A,21,122)	RS1/16S0R0J
R 1822	(B,14,123)	RS1/16S333J
R 1823	(A,12,121)	RS1/16S203J
R 1824	(A,20,117)	RS1/16S822J
R 1825	(A,19,113)	RS1/16S202J
R 1826	(A,16,115)	RS1/16S564J
R 1827	(A,17,117)	RS1/16S513J
R 1828	(A,14,119)	RS1/16S513J
R 1829	(B,24,118)	RS1/16S102J
R 1830	(B,22,117)	RS1/16S102J
R 1831	(B,21,122)	RS1/16S104J
R 1832	(B,21,126)	RS1/16S513J
R 1833	(B,16,127)	RS1/16S473J
R 1834	(B,18,127)	RS1/16S563J
R 1835	(A,20,128)	RS1/16S104J
R 1841	(A,160,110)	RS1/16S104J
R 1843	(B,144,108)	RS1/16S101J
R 1861	(B,165,122)	RS1/10S105J
R 1862	(B,164,115)	RS1/10S151J
R 1871	(B,146,79)	RS1/10S103J
R 1872	(B,149,82)	RS1/10S103J
R 1873	(B,143,84)	RN1/16SE1001D
R 1874	(B,139,84)	RN1/16SE1101D
R 1875	(B,140,89)	RN1/16SE1001D
R 1881	(B,10,120)	RS1/4S102J
R 1901	(A,78,74)	RS1/16S102J
R 1902	(B,141,42)	RS1/16S102J
R 1903	(A,78,73)	RS1/16S272J
R 1904	(B,144,43)	RS1/16S272J
R 1905	(B,160,33)	RS1/16S153J
R 1906	(B,157,33)	RS1/4S102J
R 1907	(B,175,41)	RS1/10S271J
R 1908	(B,175,63)	RS1/10S221J
R 1909	(B,175,45)	RS1/10S271J
R 1910	(A,167,59)	RS1/10S271J
R 1911	(B,175,72)	RS1/16S122J
R 1912	(B,160,58)	RS1/16S0R0J
R 1950	(B,111,90)	RS1/4S471J
R 1951	(B,169,65)	RS1/16S432J
R 1952	(B,169,64)	RS1/16S222J
R 1953	(B,170,61)	RS1/16S223J
R 1954	(B,109,41)	RS1/16S122J
R 2831	(A,38,17)	RS1/16S820J
R 2832	(A,38,10)	RS1/16S820J

Circuit Symbol and No.		Part No.
R 2833	(B,42,12)	RS1/16S223J
R 2834	(B,43,8)	RS1/16S223J
R 2835	(B,44,12)	RS1/16S471J
R 2836	(B,45,8)	RS1/16S471J
R 2837	(A,39,7)	RS1/16S820J
R 2838	(A,33,16)	RS1/16S820J
R 2839	(B,35,8)	RS1/16S223J
R 2840	(A,35,12)	RS1/16S223J
R 2841	(B,37,8)	RS1/16S471J
R 2842	(B,32,13)	RS1/16S471J
R 2843	(A,27,16)	RS1/16S820J
R 2844	(A,27,7)	RS1/16S820J
R 2845	(A,30,17)	RS1/16S223J
R 2846	(A,25,8)	RS1/16S223J
R 2847	(B,26,13)	RS1/16S471J
R 2848	(B,30,8)	RS1/16S471J
R 2849	(A,92,23)	RS1/16SS681J
R 2850	(A,89,31)	RS1/16S473J
R 2851	(A,54,9)	RS1/16S0R0J
R 2852	(A,61,10)	RS1/16S0R0J
R 2853	(A,60,9)	RS1/16S0R0J
R 2854	(A,54,7)	RS1/16S0R0J
R 2855	(A,60,5)	RS1/16S0R0J
R 2856	(A,54,5)	RS1/16S0R0J
R 2873	(B,92,10)	RS1/16S0R0J
R 2886	(B,84,28)	RS1/16S473J
R 2887	(B,86,29)	RS1/16S104J
R 2888	(B,80,28)	RS1/10S102J

CAPACITORS

C 1001	(B,141,26)	CCSRCH101J50
C 1002	(B,143,26)	CCSRCH101J50
C 1003	(B,142,11)	CCSRCH101J50
C 1004	(B,143,17)	CCSRCH101J50
C 1005	(B,123,26)	CCSRCH101J50
C 1006	(B,139,26)	CKSRYF104Z25
C 1007	(B,121,26)	CCSRCH101J50
C 1008	(B,137,26)	CKSRYF104Z25
C 1009	(B,119,26)	CCSRCH101J50
C 1010	(B,135,26)	CKSRYF104Z25
C 1011	(B,120,12)	CCSRCH471J50
C 1012	(B,133,26)	CCSRCH101J50
C 1013	(B,118,25)	CCSRCH681J50
C 1014	(B,131,26)	CCSRCH101J50
C 1015	(B,120,23)	CCSRCH681J50
C 1016	(B,129,26)	CCSRCH101J50
C 1017	(B,118,14)	CCSRCH681J50
C 1018	(B,127,26)	CCSRCH101J50
C 1019	(A,119,18)	CCSRCH681J50
C 1020	(B,125,26)	CCSRCH101J50
C 1022	(A,130,33)	CKSYB106K6R3
C 1023	(A,126,35)	CKSYB106K6R3
C 1026	(A,126,39)	CCSRCJ3R0C50
C 1027	(A,102,30)	CKSRYB105K10
C 1028	(A,106,30)	CKSRYB105K10
C 1029	(A,106,29)	CKSRYB105K10
C 1030	(A,106,27)	CKSRYB105K10
C 1031	(A,129,49)	CKSRYB105K10
C 1032	(A,122,43)	CEVW100M16

Circuit Symbol and No.		Part No.
C 1033	(A,126,46)	CKSRYB104K16
C 1034	(A,101,22)	CEVW100M16
C 1035	(A,107,22)	CEVW220M16
C 1101	(A,103,120)	CKSRYB104K16
C 1102	(A,110,101)	CEVW100M16
C 1103	(A,116,101)	CEVW220M16
C 1106	(B,111,112)	CKSRYB105K10
C 1107	(B,113,112)	CKSRYB105K10
C 1108	(B,115,112)	CKSRYB105K10
C 1109	(B,117,112)	CKSRYB105K10
C 1112	(B,117,123)	CCSRCH471J50
C 1113	(B,119,121)	CCSRCH471J50
C 1117	(B,107,123)	CKSRYB104K25
C 1201	(A,32,114)	CKSRYB104K16
C 1202	(A,36,117)	CEVW100M16
C 1203	(A,27,114)	CKSRYB105K10
C 1204	(A,138,37)	CKSRYB103K50
C 1206	(B,33,123)	CCSRCJ3R0C50
C 1208	(A,35,126)	CKSYB106K6R3
C 1209	(A,30,127)	CKSYB106K6R3
C 1210	(B,33,131)	CKSRYB473K50
C 1301	(A,90,22)	CEVW100M16
C 1302	(A,96,22)	CEVW220M16
C 1303	(A,81,24)	CKSRYB104K16
C 1304	(A,85,22)	CEVW100M16
C 1305	(A,82,18)	CKSRYB105K10
C 1306	(B,86,24)	CKSRYB105K10
C 1307	(B,86,19)	CKSRYB105K10
C 1308	(B,96,19)	CKSRYB105K10
C 1309	(B,96,18)	CKSRYB105K10
C 1311	(B,77,23)	CCSRCJ3R0C50
C 1313	(B,74,22)	CKSYB106K6R3
C 1314	(A,70,19)	CKSYB106K6R3
C 1315	(B,99,8)	CCSRCH471J50
C 1316	(B,78,16)	CKSRYB473K50
C 1318	(B,95,8)	CCSRCH471J50
C 1353	(A,65,13)	CKSRYB104K16
C 1354	(A,64,17)	CEVW100M16
C 1355	(A,64,8)	CKSRYB105K10
C 1361	(B,61,13)	CCSRCJ3R0C50
C 1363	(A,54,15)	CKSYB106K6R3
C 1364	(A,53,7)	CKSYB106K6R3
C 1365	(B,51,14)	CKSRYB473K50
C 1401	(B,46,107)	CKSQYB225K10
C 1402	(B,50,100)	CKSQYB225K10
C 1404	(B,50,88)	CKSYB475K16
C 1405	(B,42,79)	CKSRYB103K50
C 1407	(B,42,88)	CKSRYB103K50
C 1408	(B,42,51)	CKSRYB103K50
C 1410	(A,51,92)	CEVW470M6R3
C 1411	(A,53,49)	CEVW221M16
C 1415	(B,57,63)	CKSRYB103K50
C 1418	(A,57,100)	CEVW100M16
C 1423	(A,51,85)	CEVW220M16
C 1424	(A,56,83)	CKSRYB103K50
C 1425	(B,51,105)	CCSRCH6R0D50
C 1427	(B,53,111)	CCSRCH6R0D50
C 1429	(A,55,104)	CKSRYB103K50
C 1430	(A,56,74)	CKSRYB104K16
C 1431	(A,51,101)	CEVW100M16

Circuit Symbol and No.		Part No.
C 1442	(A,53,60)	CEVW221M16
C 1501	(A,62,30)	CKSQYB105K16
C 1504	(A,79,25)	CKSQYB105K16
C 1505	(A,95,29)	CKSQYB105K16
C 1506	(A,90,28)	CKSQYB105K16
C 1507	(A,60,47)	CKSQYB105K16
C 1508	(A,60,45)	CKSQYB105K16
C 1509	(A,91,32)	CKSQYB105K16
C 1510	(A,95,35)	CKSQYB105K16
C 1511	(A,95,37)	CKSQYB105K16
C 1512	(A,94,41)	CKSQYB105K16
C 1513	(A,90,44)	CKSQYB105K16
C 1514	(A,92,44)	CKSQYB105K16
C 1515	(A,78,47)	CKSRYB103K50
C 1516	(A,82,52)	CEVW220M16
C 1517	(A,61,40)	CEVW100M16
C 1551	(B,91,43)	CCSRCH7R0D50
C 1552	(B,79,35)	CKSRYB222K50
C 1553	(B,79,31)	CKSRYB222K50
C 1554	(B,76,48)	CKSRYB222K50
C 1555	(B,74,46)	CKSRYB222K50
C 1556	(B,76,56)	CCSRCJ3R0C50
C 1557	(A,92,54)	CEVW101M16
C 1558	(B,77,52)	CKSRYB103K50
C 1559	(B,75,36)	CKSQYB225K10
C 1560	(B,75,30)	CKSQYB225K10
C 1561	(A,70,49)	CEVW100M16
C 1562	(A,65,49)	CEVW100M16
C 1563	(B,96,45)	CKSYB475K16
C 1564	(A,71,56)	CKSYB475K16
C 1565	(A,98,40)	CKSRYB103K50
C 1566	(A,74,60)	CKSRYB103K50
C 1567	(A,103,35)	CEVW470M16
C 1568	(A,75,65)	CEVW470M16
C 1569	(A,102,48)	CEVW330M10
C 1570	(A,103,42)	CEVW101M4
C 1571	(A,63,64)	CEVW330M10
C 1572	(A,69,64)	CEVW101M4
C 1575	(B,80,47)	CKSRYB104K25
C 1576	(B,67,42)	CKSRYB104K25
C 1577	(A,76,51)	CEVW101M16
C 1580	(A,61,88) 22µF	CCG1183
C 1601	(B,119,101)	CKSRYB103K50
C 1602	(A,81,82)	CKSRYB104K16
C 1603	(A,91,120)	CKSRYB103K50
C 1604	(A,84,76)	CEVW100M16
C 1605	(A,87,79)	CKSRYB103K50
C 1606	(A,94,120)	CKSRYB222K50
C 1607	(A,87,81)	CKSRYB103K50
C 1610	(A,73,93)	CKSRYB102K50
C 1611	(A,95,95)	CKSRYB102K50
C 1612	(A,72,106)	CKSRYB102K50
C 1613	(A,82,113)	CKSRYB102K50
C 1614	(B,84,111)	CKSRYB105K10
C 1615	(A,90,115)	CKSRYB103K50
C 1616	(A,70,93)	CKSRYB104K16
C 1619	(A,102,90)	CKSRYB104K16
C 1620	(A,96,86)	CKSRYB104K16
C 1621	(A,94,117)	CKSRYB104K16
C 1622	(B,112,98)	CKSRYB103K50

Circuit Symbol and No.		Part No.
C 1623	(B,111,105)	CKSRYB103K50
C 1821	(A,11,118)	CKSRYB823K16
C 1822	(B,17,124)	CKSRYB104K25
C 1823	(B,17,122)	CKSRYB103K50
C 1824	(A,14,117)	CKSRYB104K16
C 1825	(B,23,122)	CKSRYB102K50
C 1826	(A,21,119)	CKSRYF104Z25
C 1862	(B,161,122)	CKSRYB103K50
C 1863	(B,163,111)	CKSYB106K6R3
C 1864	(B,168,98)	CKSRYB104K25
C 1865	(A,166,94)	CCSRCH102J50
C 1866	(A,173,96)	CKSRYB104K16
C 1867	(A,174,107)	CKSRYB105K10
C 1871	(B,161,87)	CKSRYF103Z50
C 1872	(A,146,77)	CKSRYB104K25
C 1873	(A,147,77)	CKSRYB334K10
C 1874	(A,163,90)	CKSRYF103Z50
C 1875	(A,153,79)	CEVW101M16
C 1876	(A,140,78)	CEVW470M16
C 1877	(A,154,91)	CKSRYB104K16
C 1878	(A,150,88)	CKSRYF104Z25
C 1879	(A,156,91)	CKSRYB474K10
C 1880	(A,144,77)	CKSRYB104K25
C 1881	(B,10,123)	CKSRYB104K25
C 1882	(A,146,88)	CEVW470M16
C 1901	(A,158,36)	CEVW101M16
C 1902	(A,145,46)	CEVW101M16
C 1903	(A,78,80)	CKSRYB104K16
C 1904	(B,132,41)	CKSRYB104K25
C 1905	(A,143,40)	CKSRYB103K50
C 1906	(A,161,30)	CKSRYB103K50
C 1907	(B,170,34)	CKSRYB103K50
C 1908	(A,166,31)	CEVW101M16
C 1910	(A,166,45)	CEVW101M16
C 1911	(B,168,61)	CKSRYB104K25
C 1912	(B,169,44)	CKSRYB103K50
C 1913	(B,170,56)	CKSRYB103K50
C 1914	(B,169,39)	CKSRYB103K50
C 1915	(A,166,53)	CEVW101M16
C 1916	(A,166,38)	CEVW101M16
C 1917	(A,155,46)	CEVW101M16
C 1918	(A,155,41)	CKSRYB103K50
C 1919	(A,165,74)	CEVW101M16
C 1920	(B,169,73)	CKSRYB103K50
C 1921	(B,169,69)	CKSRYB103K50
C 1922	(A,173,84)	CKSRYB104K16
C 1923	(A,166,65)	CEVW470M16
C 1924	(A,173,86)	CKSRYB103K50
C 1925	(A,172,91)	CEVW220M16
C 1950	(A,122,94)	CEVW101M16
C 1951	(B,108,85)	CKSRYB103K50
C 1952	(B,115,86)	CKSRYB103K50
C 1953	(A,127,87)	CEVW101M16
C 1954	(A,113,39)	CEVW101M16
C 1955	(B,112,44)	CKSRYB103K50
C 1956	(B,104,44)	CKSRYB103K50
C 1957	(A,111,47)	CEVW101M16
C 2813	(B,23,31)	CKSRYF104Z25
C 2814	(B,18,32)	CKSRYF104Z25
C 2831	(A,38,20)	CEVW100M16

Circuit Symbol and No.		Part No.
C 2832	(A,39,13)	CEVW100M16
C 2833	(B,42,15)	CKSRYB222K50
C 2834	(B,44,6)	CKSRYB222K50
C 2837	(A,44,7)	CEVW100M16
C 2838	(A,29,20)	CEVW100M16
C 2839	(B,35,5)	CKSRYB222K50
C 2840	(B,33,15)	CKSRYB222K50
C 2843	(A,29,13)	CEVW100M16
C 2844	(A,34,7)	CEVW100M16
C 2845	(B,28,15)	CKSRYB222K50
C 2846	(B,28,5)	CKSRYB222K50
C 2849	(A,92,24)	CKSSYB102K50
C 2851	(B,23,33)	CKSRYF103Z50
C 2879	(A,96,21)	CEVW470M16
C 2880	(A,73,40)	CKSRYF104Z25
C 2886	(B,89,25)	CKSRYF104Z25
C 2887	(B,20,32)	CKSRYF104Z25

Mother Tuner Unit
Consists of
Relay PCB
Mother PCB
Connector PCB

JKL

Unit Number:CWM9945(AVIC-X1R/XU/EW)
Unit Name:Mother Tuner Unit

MISCELLANEOUS

IC 1001	(A,129,43) IC	NJM2137V
IC 1002	(B,106,27) IC	TA2050FS1
IC 1101	(A,105,116) IC	HA12240FP
IC 1102	(A,113,109) IC	TA2050FS1
IC 1201	(A,31,118) IC	NJM2137V
IC 1301	(B,92,25) IC	TA2050FS1
IC 1302	(A,77,21) IC	NJM2137V
IC 1352	(A,61,11) IC	NJM2137V
IC 1401	(A,53,79) IC	NJM2391DL1-33
IC 1402	(A,51,107) IC	NJM4558E
IC 1501	(A,76,36) IC	CXA2069Q
IC 1551	(A,97,43) IC	NJM2561F1
IC 1552	(A,71,58) IC	NJM2561F1
IC 1601	(A,83,81) IC	TC7SH04FUS1
IC 1603	(A,83,100) IC	PE5411B
IC 1604	(A,94,87) IC	TC7SH08FUS1
IC 1605	(A,100,90) IC	TC7SH08FUS1
IC 1607	(A,92,117) IC	TC7SH08FUS1
IC 1608	(A,71,95) IC	TC7SH04FUS1
IC 1821	(A,18,123) IC	NJM2904M
IC 1871	(A,146,80) IC	S-812C33AMC-C2N
IC 1872	(A,153,88) IC	S-L2980A50MC-C7J
IC 1901	(A,166,84) IC	NJM2391DL1-33
IC 1902	(B,164,61) IC	M5237ML
Q 1101	(A,121,108) Transistor	DTC124EU
Q 1102	(A,120,115) Transistor	2SA1576
Q 1201	(A,135,41) Transistor	2SA1037K
Q 1202	(A,136,45) Transistor	2SC2412K
Q 1401	(A,38,33) Transistor	2SC3357

Circuit Symbol and No.		Part No.
Q 1402	(B,51,41) Transistor	2SC3127
Q 1403	(B,67,106) Transistor	DTC124EU
Q 1404	(B,67,103) Transistor	DTC124EU
Q 1405	(B,82,86) Transistor	DTC124EU
Q 1406	(B,67,99) Transistor	DTC124EU
Q 1551	(B,80,44) Transistor	2SA1576
Q 1552	(B,67,39) Transistor	2SA1576
Q 1555	(B,73,51) Transistor	2SC2412K
Q 1556	(B,71,46) Transistor	2SC2412K
Q 1557	(A,76,57) Transistor	2SC2412K
Q 1558	(B,92,48) Transistor	2SC2412K
Q 1559	(B,63,50) Transistor	FMG12
Q 1581	(B,59,85) Transistor	2SA1037K
Q 1582	(B,59,91) Transistor	2SC4081
Q 1583	(B,65,88) Transistor	2SC4081
Q 1601	(B,114,101) Transistor	2SC2412K
Q 1607	(A,68,109) Transistor	2SC4081
Q 1801	(B,149,65) Transistor	2SC3545
Q 1802	(B,132,75) Transistor	DTC144EK
Q 1803	(B,137,75) Transistor	DTC144EK
Q 1821	(B,16,118) Transistor	DTC114EU
Q 1822	(B,21,134) Transistor	DTC114WK
Q 1871	(B,150,86) Transistor	DTC114EU
Q 1872	(B,146,83) Transistor	2SA1037K
Q 1881	(A,9,126) Transistor	DTC114EU
Q 1901	(A,78,77) Transistor	2SA1036K
Q 1902	(B,136,42) Transistor	2SA1036K
Q 1903	(A,81,71) Transistor	DTC114EK
Q 1904	(B,146,41) Transistor	DTC114EK
Q 1905	(B,165,34) Transistor	2SB1260
Q 1906	(B,158,39) Transistor	DTC114EK
Q 1907	(A,172,61) Transistor	2SB1629
Q 1908	(A,173,42) Transistor	2SD2396
Q 1909	(A,173,72) Transistor	2SD2396
Q 1951	(B,111,85) Transistor	2SD2098
Q 1952	(B,109,45) Transistor	2SD2098
Q 2801	(A,90,25) Transistor	2SC4081
Q 2831	(B,39,12) Transistor	DTC323TU
Q 2832	(B,41,8) Transistor	DTC323TU
Q 2833	(B,32,8) Transistor	DTC323TU
Q 2844	(B,34,12) Transistor	DTC323TU
Q 2845	(B,29,12) Transistor	DTC323TU
Q 2846	(B,27,8) Transistor	DTC323TU
Q 2886	(B,87,26) Transistor	2SC4081
D 1001	(B,138,10) Diode	UDZS6R8(B)
D 1002	(B,138,17) Diode	UDZS6R8(B)
D 1003	(B,140,11) Diode	UDZS6R8(B)
D 1004	(B,135,15) Diode	UDZS6R8(B)
D 1005	(B,136,9) Diode	UDZS6R8(B)
D 1006	(B,140,17) Diode	UDZS6R8(B)
D 1007	(B,133,15) Diode	UDZS6R8(B)
D 1008	(B,133,8) Diode	UDZS6R8(B)
D 1009	(B,131,15) Diode	UDZS6R8(B)
D 1010	(B,131,7) Diode	UDZS6R8(B)
D 1011	(B,129,15) Diode	UDZS6R8(B)
D 1012	(B,131,23) Diode	UMZ6R8N
D 1013	(B,135,22) Diode	MA153
D 1014	(B,126,23) Diode	UMZ6R8N
D 1015	(B,123,22) Diode	UMZ6R8N
D 1016	(B,126,16) Diode	UDZS6R8(B)

Circuit Symbol and No.		Part No.
D 1017	(B,126,9) Diode	UDZS6R8(B)
D 1018	(B,124,17) Diode	UDZS6R8(B)
D 1019	(B,122,8) Diode	UMZ6R8N
D 1020	(B,118,9) Diode	UMZ6R8N
D 1021	(B,121,18) Diode	UMZ6R8N
D 1022	(B,117,17) Diode	UMZ6R8N
D 1023	(B,128,9) Diode	UDZS6R8(B)
D 1101	(B,116,119) Diode	UMZ6R8N
D 1102	(B,115,132) Diode	UMZ6R8N
D 1103	(B,105,129) Diode	DAN202U
D 1104	(B,105,133) Diode	DAP202U
D 1201	(A,138,35) Diode	1SS355
D 1202	(A,137,49) Diode	1SS355
D 1203	(A,54,124) Diode	HZU12(B2)
D 1204	(A,56,124) Diode	HZU12(B2)
D 1205	(A,43,124) Diode	HZU12(B2)
D 1206	(A,49,124) Diode	HZU12(B2)
D 1207	(A,32,131) Diode	UMZ6R8N
D 1208	(A,35,131) Diode	UMZ6R8N
D 1301	(B,108,19) Diode	UMZ6R8N
D 1302	(B,93,14) Diode	UMZ6R8N
D 1303	(B,70,12) Diode	UMZ6R8N
D 1304	(B,70,15) Diode	UMZ6R8N
D 1353	(B,50,8) Diode	UMZ6R8N
D 1354	(B,48,16) Diode	UMZ6R8N
D 1401	(A,51,73) Diode	1SR154-400
D 1402	(A,51,70) Diode	1SR154-400
D 1403	(A,52,66) Diode	1SR154-400
D 1551	(B,101,46) Diode	MA153
D 1552	(B,69,61) Diode	MA153
D 1553	(A,60,54) Diode	DAP202U
D 1580	(A,70,89) Diode	MA111
D 1581	(B,64,92) Diode	DAN202U
D 1582	(B,67,84) Diode	UDZS8R2(B)
D 1602	(B,110,102) Diode	DAN202U
D 1801	(B,124,76) Diode	HZU3R3(B1)
D 1821	(A,9,121) Diode	S1G-6904G2P
D 1822	(A,12,125) Diode	UDZS18(B)
D 1823	(A,14,125) Diode	UDZS18(B)
D 1824	(A,19,115) Diode	1SS355
D 1871	(B,140,87) Diode	UDZS5R6(B)
D 1881	(B,10,115) Diode	UDZS18(B)
D 1882	(A,58,116) Diode	1SS355
D 1883	(B,10,126) Diode	UDZS6R8(B)
D 1884	(B,142,110) Diode	RB500V-40
D 1902	(B,168,42) Diode	HZU9R1(B3)
D 1903	(B,168,71) Diode	UDZS5R6(B)
D 1950	(B,105,84) Diode	UDZS13(B)
D 1951	(B,114,44) Diode	UDZS5R6(B)
D 2801	(B,26,33) Diode	UDZS6R8(B)
D 2802	(B,22,35) Diode	UDZS6R8(B)
D 2811	(B,96,36) Diode	UDZS10(B)
D 2812	(B,102,36) Diode	UDZS10(B)
D 2813	(B,76,28) Diode	UDZS5R6(B)
D 2814	(B,76,26) Diode	UDZS5R6(B)
D 2886	(B,73,35) Diode	S1G-6904G2P
D 2887	(B,73,32) Diode	S1G-6904G2P
ZNR1401	(A,18,34) Surge Protector	RCCA-201Q31UA-PI
L 1001	(A,141,33) Inductor	CTF1334
L 1002	(A,142,33) Inductor	CTF1334

Circuit Symbol and No.		Part No.
L 1003	(A,142,36) Inductor	CTF1334
L 1004	(A,143,36) Inductor	CTF1334
L 1005	(A,133,31) Inductor	CTF1306
L 1006	(A,135,31) Inductor	CTF1306
L 1007	(A,136,31) Inductor	CTF1306
L 1008	(A,136,33) Inductor	CTF1306
L 1009	(A,116,21) Inductor	CTF1306
L 1010	(A,118,21) Inductor	CTF1306
L 1011	(A,118,25) Inductor	CTF1306
L 1012	(A,117,28) Inductor	CTF1306
L 1013	(A,121,30) Inductor	CTF1334
L 1014	(A,122,30) Inductor	CTF1334
L 1015	(A,124,30) Inductor	CTF1334
L 1016	(A,123,22) Inductor	CTF1382
L 1017	(A,127,21) Inductor	CTF1334
L 1018	(A,127,26) Inductor	CTF1382
L 1019	(A,128,26) Inductor	CTF1382
L 1020	(A,130,29) Inductor	CTF1334
L 1021	(A,132,34) Inductor	CTF1334
L 1022	(A,128,21) Inductor	CTF1334
L 1026	(B,122,41) Inductor	CTF1399
L 1101	(A,105,108) Inductor	LCYA2R2J2520
L 1102	(A,112,118) Inductor	CTF1334
L 1103	(A,113,118) Inductor	CTF1334
L 1104	(A,117,118) Inductor	CTF1334
L 1105	(A,115,118) Inductor	CTF1334
L 1201	(A,35,113) Inductor	CTF1399
L 1301	(B,82,26) Inductor	CTF1399
L 1302	(B,90,18) Inductor	CTF1334
L 1303	(B,86,12) Inductor	CTF1334
L 1304	(B,103,18) Inductor	CTF1334
L 1305	(B,101,12) Inductor	CTF1334
L 1351	(A,67,21) Inductor	CTF1399
L 1401	(B,40,45) Inductor	LCTAW4R7J2520
L 1402	(A,28,33) Inductor	LCYAR12J2520
L 1403	(B,51,79) Inductor	LCTAW1R0J2520
L 1404	(A,32,36) Inductor	LCTCR10K2125
L 1405	(A,56,92) Inductor	LCYA1R0J2520
L 1406	(B,59,61) Inductor	LCTAW1R0J2520
L 1407	(A,44,34) Coil	CTC1143
L 1408	(B,51,51) Inductor	LCTCR10K2125
L 1409	(B,55,44) Inductor	LCTCR18K2125
L 1410	(B,55,52) Inductor	LCTAW101J2520
L 1411	(A,39,27) Coil	CTC1142
L 1412	(B,38,23) Inductor	LCTAW101J2520
L 1413	(A,49,26) Coil	CTC1139
L 1501	(A,81,58) Inductor	LCYA100J2520
L 1551	(B,82,55) Inductor	LCTAW101J2520
L 1552	(B,90,52) Inductor	LCTAW100J2520
L 1553	(B,103,41) Inductor	LCTAW100J2520
L 1554	(B,75,62) Inductor	LCTAW100J2520
L 1555	(B,83,58) Inductor	LCTAW100J2520
L 1601	(A,89,80) Inductor	CTF1379
L 1602	(B,71,95) Inductor	CTF1379
L 1603	(A,98,95) Inductor	CTF1379
L 1604	(A,69,105) Inductor	CTF1379
L 1766	(A,80,115) Inductor	CTF1379
L 1801	(B,143,67) Inductor	LCTCR22K2125
L 1802	(B,133,67) Inductor	LCTAW1R0J2520
L 1803	(B,115,77) Inductor	LCTAW2R2J2520

Circuit Symbol and No.		Part No.
L 1804	(B,121,73) Inductor	LCTAW1R0J2520
L 1821	(A,8,117) Inductor	CTF1306
L 1841	(A,146,114) Inductor	CTF1334
L 1842	(B,148,109) Inductor	CTF1334
L 1843	(A,147,107) Inductor	CTF1334
L 1844	(A,147,105) Inductor	CTF1334
L 1845	(B,148,106) Inductor	CTF1334
L 1846	(B,148,104) Inductor	CTF1334
L 1847	(A,147,98) Inductor	CTF1393
L 1848	(A,155,96) Inductor	CTF1393
L 1849	(B,156,116) Inductor	CTF1393
L 1850	(A,161,113) Inductor	CTF1334
L 1851	(B,150,100) Inductor	CTF1334
L 1852	(B,140,108) Inductor	CTF1306
L 1853	(B,132,100) Inductor	CTF1306
L 1861	(B,170,106) Inductor	CTF1334
L 1862	(B,170,96) Inductor	CTF1334
L 1871	(B,152,79) Inductor	CTF1334
L 1872	(A,166,90) Inductor	CTF1393
L 1873	(B,158,88) Inductor	CTF1393
L 1874	(B,128,68) Inductor	CTF1557
L 1881	(B,10,117) Inductor	CTF1306
L 2811	(B,98,34) Inductor	CTF1557
L 2812	(B,99,22) Inductor	CTF1557
L 2813	(B,42,19) Inductor	CTF1334
L 2814	(B,41,17) Inductor	CTF1334
L 2831	(A,36,16) Inductor	CTF1306
L 2832	(A,20,22) Inductor	CTF1306
L 2833	(A,23,21) Inductor	CTF1306
L 2834	(A,33,20) Inductor	CTF1306
L 2835	(A,23,23) Inductor	CTF1306
L 2836	(A,21,21) Inductor	CTF1306
L 2851	(B,71,21) Inductor	CTF1334
L 2852	(B,75,21) Inductor	CTF1334
L 2853	(B,79,20) Inductor	CTF1334
L 2854	(B,71,19) Inductor	CTF1334
L 2855	(B,75,19) Inductor	CTF1334
L 2856	(B,79,18) Inductor	CTF1334
L 2857	(B,88,11) Inductor	CTF1334
L 2859	(A,93,17) Inductor	CTF1334
L 2861	(B,75,23) Inductor	CTF1334
L 2862	(B,82,28) Inductor	CTF1334
L 2886	(B,82,25) Inductor	CTF1295
X 1601	(A,86,114) Radiator 12.58MHz	CSS1601
VR1551	(A,96,48) Semi-fixed 10kΩ(B)	CCP1448
⚠FU1202	(A,44,118) Fuse 4A	CEK1288
⚠FU1703	(A,86,122) Fuse 4A	CEK1288
⚠FU1704	(A,68,124) Fuse 4A	CEK1288
⚠FU1951	(A,118,87) Fuse 2A	CEK1284
⚠FU2801	(A,24,20) Fuse 5A	CEK1289
GY1865	(A,167,101) Sensor	CSX1074
GY1863	(A,169,113) Sensor	CSX1078
Y 1801	(A,124,70) Tuner Unit	CWE1674
Y 1401	(A,46,44) FM/AM Tuner Unit	CWE1650
EF1001	(A,139,32) EMI Filter	CCG1082
EF1201	(A,30,131) EMI Filter	CCG1067
EF1301	(A,74,17) EMI Filter	CCG1067
EF1351	(A,52,10) EMI Filter	CCG1067
EF1701	(A,91,125) EMI Filter	CCG1067
EF1901	(A,157,29) EMI Filter	CCG1172
EF1902	(A,146,39) EMI Filter	CCG1172
EF1903	(A,152,39) EMI Filter	CCG1172
EF2801	(A,70,32) EMI Filter	CCG1067

RESISTORS

Circuit Symbol and No.		Part No.
R 1001	(B,127,31)	RS1/16S750J
R 1004	(A,128,37)	RS1/16S472J
R 1005	(A,129,38)	RS1/16S472J
R 1006	(A,126,43)	RS1/16S512J
R 1007	(A,125,42)	RS1/16S102J
R 1008	(A,123,38)	RS1/16S101J
R 1009	(A,125,39)	RS1/16S512J
R 1010	(A,111,32)	RS1/16S101J
R 1011	(A,111,28)	RS1/16S101J
R 1012	(A,109,30)	RS1/16S223J
R 1013	(A,109,29)	RS1/16S223J
R 1014	(A,109,32)	RS1/16S102J
R 1015	(A,109,27)	RS1/16S102J
R 1016	(A,129,48)	RS1/16S563J
R 1017	(A,126,49)	RS1/16S473J
R 1102	(A,101,112)	RS1/16S102J
R 1104	(A,104,123)	RS1/10S101J
R 1105	(A,102,123)	RS1/10S101J
R 1106	(A,103,126)	RS1/10S620J
R 1107	(A,113,115)	RS1/16S102J
R 1108	(A,115,115)	RS1/16S102J
R 1109	(B,112,116)	RS1/16S223J
R 1110	(B,116,116)	RS1/16S223J
R 1111	(A,111,115)	RS1/16S101J
R 1112	(A,117,115)	RS1/16S101J
R 1113	(A,120,112)	RS1/16S332J
R 1114	(A,120,111)	RS1/16S682J
R 1115	(A,120,119)	RS1/10S222J
R 1118	(A,101,111)	RS1/16S0R0J
R 1119	(A,101,109)	RS1/16S0R0J
R 1201	(A,135,36)	RS1/16S473J
R 1202	(A,29,117)	RS1/16S563J
R 1203	(A,29,114)	RS1/16S473J
R 1204	(A,136,38)	RS1/16S473J
R 1205	(A,138,42)	RS1/16S473J
R 1206	(A,138,39)	RS1/16S473J
R 1207	(A,136,48)	RS1/16S473J
R 1208	(B,29,118)	RS1/16S512J
R 1209	(B,31,118)	RS1/16S102J
R 1210	(B,35,119)	RS1/16S101J
R 1211	(B,33,121)	RS1/16S512J
R 1212	(A,31,123)	RS1/16S472J
R 1213	(A,34,123)	RS1/16S472J
R 1214	(B,55,126)	RS1/16S0R0J
R 1215	(B,57,127)	RS1/16S0R0J
R 1216	(B,43,124)	RS1/16S0R0J
R 1217	(B,49,124)	RS1/16S0R0J
R 1218	(B,30,129)	RS1/16S103J
R 1219	(B,32,133)	RS1/16S103J
R 1220	(A,33,128)	RS1/16S750J
R 1301	(A,82,21)	RS1/16S563J
R 1302	(A,80,18)	RS1/16S473J
R 1303	(A,85,17)	RS1/16S102J
R 1304	(A,99,17)	RS1/16S102J
R 1305	(B,86,16)	RS1/16S223J
R 1306	(B,100,15)	RS1/16S223J
R 1307	(B,88,18)	RS1/16S101J
R 1308	(B,100,19)	RS1/16S101J
R 1309	(B,77,20)	RS1/16S512J
R 1310	(B,81,20)	RS1/16S102J
R 1311	(A,75,25)	RS1/16S101J
R 1312	(B,78,23)	RS1/16S512J
R 1313	(A,72,20)	RS1/16S472J
R 1314	(A,72,23)	RS1/16S472J
R 1315	(A,72,17)	RS1/16S103J
R 1316	(B,78,14)	RS1/16S103J
R 1317	(B,75,17)	RS1/16S750J
R 1351	(A,65,11)	RS1/16S563J
R 1352	(A,66,8)	RS1/16S473J
R 1357	(B,61,10)	RS1/16S512J
R 1358	(B,65,10)	RS1/16S102J
R 1359	(A,58,15)	RS1/16S101J
R 1360	(B,62,13)	RS1/16S512J
R 1363	(A,56,10)	RS1/16S472J
R 1364	(A,56,13)	RS1/16S472J
R 1365	(B,52,10)	RS1/16S103J
R 1366	(B,51,12)	RS1/16S103J
R 1367	(A,53,12)	RS1/16S750J
R 1401	(A,25,33)	RS1/16S105J
R 1402	(B,47,110)	RS1/16S0R0J
R 1403	(B,49,102)	RS1/16S0R0J
R 1404	(B,49,59)	RS1/16S681J
R 1405	(B,49,56)	RS1/16S681J
R 1406	(B,43,32)	RS1/16S821J
R 1407	(A,56,106)	RS1/16S103J
R 1408	(A,58,106)	RS1/16S103J
R 1409	(A,52,111)	RS1/16S273J
R 1410	(B,53,102)	RS1/16S273J
R 1411	(B,47,34)	RS1/16S330J
R 1412	(A,56,110)	RS1/16S183J
R 1413	(A,56,108)	RS1/16S183J
R 1414	(B,55,46)	RS1/16S151J
R 1415	(B,51,107)	RS1/16S753J
R 1416	(B,53,109)	RS1/16S753J
R 1417	(B,55,42)	RS1/16S681J
R 1418	(B,55,38)	RS1/16S152J
R 1419	(B,41,29)	RS1/16S332J
R 1420	(B,50,36)	RS1/16S680J
R 1421	(B,53,36)	RS1/16S151J
R 1422	(B,50,23)	RS1/16S151J
R 1423	(B,46,26)	RS1/16S101J
R 1424	(B,53,22)	RS1/16S680J
R 1425	(B,72,100)	RS1/16S473J
R 1426	(B,49,81)	RS1/16S681J
R 1427	(B,86,85)	RS1/16S473J
R 1428	(B,49,54)	RS1/16S681J
R 1429	(B,49,64)	RS1/16S681J
R 1430	(B,49,66)	RS1/16S681J
R 1431	(B,49,61)	RS1/16S681J
R 1432	(B,72,102)	RS1/16S473J
R 1433	(B,71,106)	RS1/16S473J
R 1501	(A,63,35)	RS1/16S0R0J
R 1502	(A,61,34)	RS1/16S0R0J
R 1505	(A,91,30)	RS1/16S562J
R 1506	(A,88,26)	RS1/16S562J
R 1507	(A,91,34)	RS1/16S562J
R 1508	(A,91,35)	RS1/16S562J
R 1509	(A,91,40)	RS1/16S562J
R 1510	(A,91,41)	RS1/16S562J
R 1511	(A,85,47)	RS1/16S101J
R 1512	(A,86,47)	RS1/16S101J
R 1551	(B,69,34)	RS1/16S0R0J
R 1552	(B,69,32)	RS1/16S0R0J
R 1553	(B,76,44)	RS1/16S182J
R 1554	(B,72,42)	RS1/16S182J
R 1555	(B,78,47)	RS1/16S102J
R 1556	(B,70,39)	RS1/16S102J
R 1557	(B,91,45)	RS1/16S103J
R 1558	(B,76,57)	RS1/16S123J
R 1559	(B,97,50)	RS1/16S123J
R 1560	(B,72,58)	RS1/16S103J
R 1561	(B,72,35)	RS1/16S473J
R 1562	(B,72,31)	RS1/16S473J
R 1563	(B,69,50)	RS1/16S471J
R 1564	(B,69,47)	RS1/16S471J
R 1565	(B,72,56)	RS1/16S471J
R 1566	(B,98,47)	RS1/16S471J
R 1567	(A,64,53)	RS1/16S821J
R 1568	(A,69,53)	RS1/16S821J
R 1569	(B,75,34)	RS1/16S821J
R 1570	(B,75,32)	RS1/16S821J
R 1571	(B,70,53)	RS1/16S104J
R 1572	(B,65,53)	RS1/16S104J
R 1573	(A,108,39)	RS1/16S750J
R 1574	(A,67,55)	RS1/16S105J
R 1575	(A,65,68)	RS1/16S750J
R 1576	(A,70,68)	RS1/16S0R0J
R 1580	(B,98,43)	RS1/16S105J
R 1581	(B,55,85)	RS1/4S821J
R 1582	(B,56,90)	RS1/16S223J
R 1583	(B,62,89)	RS1/16S473J
R 1584	(B,59,89)	RS1/16S223J
R 1585	(B,70,90)	RS1/16S563J
R 1586	(B,69,86)	RS1/16S223J
R 1587	(B,62,84)	RS1/16S473J
R 1588	(A,70,86)	RS1/16S101J
R 1601	(B,115,105)	RS1/16S272J
R 1602	(B,117,101)	RS1/16S101J
R 1603	(B,107,102)	RS1/16S333J
R 1604	(B,113,105)	RS1/16S473J
R 1607	(A,90,81)	RS1/16S104J
R 1610	(A,94,83)	RS1/16S681J
R 1611	(A,100,87)	RS1/16S681J
R 1612	(A,84,85)	RAB4C681J
R 1613	(B,97,109)	RS1/16S472J
R 1614	(A,94,89)	RS1/16S681J
R 1615	(A,80,86)	RS1/16S473J
R 1617	(A,73,90)	RS1/16S681J
R 1618	(A,96,92)	RAB4C681J
R 1619	(A,98,88)	RS1/16S104J
R 1621	(A,75,82)	RS1/16S470J
R 1622	(A,76,82)	RS1/16S470J
R 1623	(A,76,86)	RS1/16S103J
R 1624	(A,76,84)	RS1/16S103J

Circuit Symbol and No.		Part No.
R 1625	(A,96,98)	RAB4C681J
R 1626	(A,72,99)	RAB4C681J
R 1627	(B,70,92)	RS1/16S563J
R 1628	(A,71,103)	RAB4C681J
R 1629	(A,96,102)	RAB4C681J
R 1630	(A,96,104)	RS1/16S473J
R 1631	(A,97,107)	RAB4C681J
R 1632	(A,67,112)	RS1/16S473J
R 1633	(A,67,107)	RS1/16S473J
R 1634	(A,72,109)	RAB4C681J
R 1635	(A,97,111)	RAB4C681J
R 1636	(A,92,122)	RS1/16S473J
R 1637	(B,97,118)	RS1/16S473J
R 1638	(B,71,97)	RS1/16S104J
R 1640	(B,79,109)	RS1/16S681J
R 1641	(A,92,114)	RS1/16S681J
R 1642	(B,86,111)	RS1/16S473J
R 1643	(B,72,108)	RS1/16S473J
R 1644	(B,80,111)	RS1/16S473J
R 1647	(B,76,109)	RS1/16S473J
R 1651	(B,77,116)	RS1/16S473J
R 1652	(B,79,116)	RS1/16S473J
R 1657	(B,72,110)	RS1/16S473J
R 1658	(B,72,112)	RS1/16S473J
R 1659	(A,82,79)	RS1/16S473J
R 1661	(A,90,85)	RS1/16S681J
R 1662	(A,87,85)	RS1/16S681J
R 1663	(B,88,88)	RS1/16S681J
R 1664	(A,88,85)	RS1/16S681J
R 1801	(B,147,69)	RS1/16S152J
R 1802	(B,144,65)	RS1/16S151J
R 1803	(B,145,63)	RS1/16S681J
R 1806	(B,148,102)	RS1/16S0R0J
R 1807	(B,128,73)	RS1/16S391J
R 1808	(B,132,78)	RS1/16S473J
R 1810	(B,120,68)	RS1/16S221J
R 1821	(A,21,122)	RS1/16S0R0J
R 1822	(B,14,123)	RS1/16S333J
R 1823	(A,12,121)	RS1/16S203J
R 1824	(A,20,117)	RS1/16S822J
R 1825	(A,19,113)	RS1/16S202J
R 1826	(A,16,115)	RS1/16S564J
R 1827	(A,17,117)	RS1/16S513J
R 1828	(A,14,119)	RS1/16S513J
R 1829	(B,24,118)	RS1/16S102J
R 1830	(B,22,117)	RS1/16S102J
R 1831	(B,21,122)	RS1/16S104J
R 1832	(B,21,126)	RS1/16S513J
R 1833	(B,16,127)	RS1/16S473J
R 1834	(B,18,127)	RS1/16S563J
R 1835	(A,20,128)	RS1/16S104J
R 1841	(A,160,110)	RS1/16S104J
R 1843	(B,144,108)	RS1/16S101J
R 1861	(B,165,122)	RS1/10S105J
R 1862	(B,164,115)	RS1/10S151J
R 1871	(B,146,79)	RS1/10S103J
R 1872	(B,149,82)	RS1/10S103J
R 1873	(B,143,84)	RN1/16SE1001D
R 1874	(B,139,84)	RN1/16SE1101D
R 1875	(B,140,89)	RN1/16SE1001D

Circuit Symbol and No.		Part No.
R 1881	(B,10,120)	RS1/4S102J
R 1901	(A,78,74)	RS1/16S102J
R 1902	(B,141,42)	RS1/16S102J
R 1903	(A,78,73)	RS1/16S272J
R 1904	(B,144,43)	RS1/16S272J
R 1905	(B,160,33)	RS1/16S153J
R 1906	(B,157,33)	RS1/4S102J
R 1907	(B,175,41)	RS1/10S271J
R 1908	(B,175,63)	RS1/10S221J
R 1909	(B,175,45)	RS1/10S271J
R 1910	(A,167,59)	RS1/10S271J
R 1911	(B,175,72)	RS1/16S122J
R 1912	(B,160,58)	RS1/16S0R0J
R 1950	(B,111,90)	RS1/4S471J
R 1951	(B,169,65)	RS1/16S432J
R 1952	(B,169,64)	RS1/16S222J
R 1953	(B,170,61)	RS1/16S223J
R 1954	(B,109,41)	RS1/16S122J
R 2831	(A,38,17)	RS1/16S820J
R 2832	(A,38,10)	RS1/16S820J
R 2833	(B,42,12)	RS1/16S223J
R 2834	(B,43,8)	RS1/16S223J
R 2835	(B,44,12)	RS1/16S471J
R 2836	(B,45,8)	RS1/16S471J
R 2837	(A,39,7)	RS1/16S820J
R 2838	(A,33,16)	RS1/16S820J
R 2839	(B,35,8)	RS1/16S223J
R 2840	(A,35,12)	RS1/16S223J
R 2841	(B,37,8)	RS1/16S471J
R 2842	(B,32,13)	RS1/16S471J
R 2843	(A,27,16)	RS1/16S820J
R 2844	(A,27,7)	RS1/16S820J
R 2845	(A,30,17)	RS1/16S223J
R 2846	(A,25,8)	RS1/16S223J
R 2847	(B,26,13)	RS1/16S471J
R 2848	(B,30,8)	RS1/16S471J
R 2849	(A,92,23)	RS1/16SS681J
R 2850	(A,89,31)	RS1/16S473J
R 2851	(A,54,9)	RS1/16S0R0J
R 2852	(A,61,10)	RS1/16S0R0J
R 2853	(A,60,9)	RS1/16S0R0J
R 2854	(A,54,7)	RS1/16S0R0J
R 2855	(A,60,5)	RS1/16S0R0J
R 2856	(A,54,5)	RS1/16S0R0J
R 2873	(B,92,10)	RS1/16S0R0J
R 2886	(B,84,28)	RS1/16S473J
R 2887	(B,86,29)	RS1/16S104J
R 2888	(B,80,28)	RS1/10S102J

CAPACITORS

C 1001	(B,141,26)	CCSRCH101J50
C 1002	(B,143,26)	CCSRCH101J50
C 1003	(B,142,11)	CCSRCH101J50
C 1004	(B,143,17)	CCSRCH101J50
C 1005	(B,123,26)	CCSRCH101J50
C 1006	(B,139,26)	CKSRYF104Z25
C 1007	(B,121,26)	CCSRCH101J50
C 1008	(B,137,26)	CKSRYF104Z25
C 1009	(B,119,26)	CCSRCH101J50

Circuit Symbol and No.		Part No.
C 1010	(B,135,26)	CKSRYF104Z25
C 1011	(B,120,12)	CCSRCH471J50
C 1012	(B,133,26)	CCSRCH101J50
C 1013	(B,118,25)	CCSRCH681J50
C 1014	(B,131,26)	CCSRCH101J50
C 1015	(B,120,23)	CCSRCH681J50
C 1016	(B,129,26)	CCSRCH101J50
C 1017	(B,118,14)	CCSRCH681J50
C 1018	(B,127,26)	CCSRCH101J50
C 1019	(A,119,18)	CCSRCH681J50
C 1020	(B,125,26)	CCSRCH101J50
C 1022	(A,130,33)	CKSYB106K6R3
C 1023	(A,126,35)	CKSYB106K6R3
C 1026	(A,126,39)	CCSRCJ3R0C50
C 1027	(A,102,30)	CKSRYB105K10
C 1028	(A,106,30)	CKSRYB105K10
C 1029	(A,106,29)	CKSRYB105K10
C 1030	(A,106,27)	CKSRYB105K10
C 1031	(A,129,49)	CKSRYB105K10
C 1032	(A,122,43)	CEVW100M16
C 1033	(A,126,46)	CKSRYB104K16
C 1034	(A,101,22)	CEVW100M16
C 1035	(A,107,22)	CEVW220M16
C 1101	(A,103,120)	CKSRYB104K16
C 1102	(A,110,101)	CEVW100M16
C 1103	(A,116,101)	CEVW220M16
C 1106	(B,111,112)	CKSRYB105K10
C 1107	(B,113,112)	CKSRYB105K10
C 1108	(B,115,112)	CKSRYB105K10
C 1109	(B,117,112)	CKSRYB105K10
C 1112	(B,117,123)	CCSRCH471J50
C 1113	(B,119,121)	CCSRCH471J50
C 1117	(B,107,123)	CKSRYB104K25
C 1201	(A,32,114)	CKSRYB104K16
C 1202	(A,36,117)	CEVW100M16
C 1203	(A,27,114)	CKSRYB105K10
C 1204	(A,138,37)	CKSRYB103K50
C 1206	(B,33,123)	CCSRCJ3R0C50
C 1208	(A,35,126)	CKSYB106K6R3
C 1209	(A,30,127)	CKSYB106K6R3
C 1210	(B,33,131)	CKSRYB473K50
C 1301	(A,90,22)	CEVW100M16
C 1302	(A,96,22)	CEVW220M16
C 1303	(A,81,24)	CKSRYB104K16
C 1304	(A,85,22)	CEVW100M16
C 1305	(A,82,18)	CKSRYB105K10
C 1306	(B,86,24)	CKSRYB105K10
C 1307	(B,86,19)	CKSRYB105K10
C 1308	(B,96,19)	CKSRYB105K10
C 1309	(B,96,18)	CKSRYB105K10
C 1311	(B,77,23)	CCSRCJ3R0C50
C 1313	(B,74,22)	CKSYB106K6R3
C 1314	(A,70,19)	CKSYB106K6R3
C 1315	(B,99,8)	CCSRCH471J50
C 1316	(B,78,16)	CKSRYB473K50
C 1318	(B,95,8)	CCSRCH471J50
C 1353	(A,65,13)	CKSRYB104K16
C 1354	(A,64,17)	CEVW100M16
C 1355	(A,64,8)	CKSRYB105K10
C 1361	(B,61,13)	CCSRCJ3R0C50

Circuit Symbol and No.		Part No.
C 1363	(A,54,15)	CKSYB106K6R3
C 1364	(A,53,7)	CKSYB106K6R3
C 1365	(B,51,14)	CKSRYB473K50
C 1401	(B,46,107)	CKSQYB225K10
C 1402	(B,50,100)	CKSQYB225K10
C 1403	(A,26,36)	CCSRCH270J50
C 1404	(B,50,88)	CKSYB475K16
C 1405	(B,42,79)	CKSRYB103K50
C 1406	(A,28,36)	CCSRCH220J50
C 1407	(B,42,88)	CKSRYB103K50
C 1408	(B,42,51)	CKSRYB103K50
C 1409	(A,31,33)	CCSRCH270J50
C 1410	(A,51,92)	CEVW470M6R3
C 1411	(A,53,49)	CEVW221M16
C 1412	(A,33,33)	CCSRCH330J50
C 1413	(A,35,36)	CCSRCH470J50
C 1414	(B,39,33)	CKSRYB103K50
C 1415	(B,57,63)	CKSRYB103K50
C 1418	(A,57,100)	CEVW100M16
C 1419	(B,58,40)	CKSRYB103K50
C 1420	(B,50,48)	CCSRCH270J50
C 1421	(A,50,32)	CKSRYB103K50
C 1422	(B,51,45)	CCSRCH150J50
C 1423	(A,51,85)	CEVW220M16
C 1424	(A,56,83)	CKSRYB103K50
C 1425	(B,51,105)	CCSRCH6R0D50
C 1426	(B,86,89)	CKSRYB103K50
C 1427	(B,53,111)	CCSRCH6R0D50
C 1428	(B,55,39)	CKSRYB222K50
C 1429	(A,55,104)	CKSRYB103K50
C 1430	(A,56,74)	CKSRYB104K16
C 1431	(A,51,101)	CEVW100M16
C 1432	(A,34,24)	CKSRYB103K50
C 1433	(B,49,28)	CKSRYB222K50
C 1434	(A,44,23)	CKSRYB222K50
C 1435	(B,48,22)	CKSRYB222K50
C 1436	(B,74,104)	CKSRYB103K50
C 1437	(B,54,48)	CKSRYB103K50
C 1442	(A,53,60)	CEVW221M16
C 1501	(A,62,30)	CKSQYB105K16
C 1504	(A,79,25)	CKSQYB105K16
C 1505	(A,95,29)	CKSQYB105K16
C 1506	(A,90,28)	CKSQYB105K16
C 1507	(A,60,47)	CKSQYB105K16
C 1508	(A,60,45)	CKSQYB105K16
C 1509	(A,91,32)	CKSQYB105K16
C 1510	(A,95,35)	CKSQYB105K16
C 1511	(A,95,37)	CKSQYB105K16
C 1512	(A,94,41)	CKSQYB105K16
C 1513	(A,90,44)	CKSQYB105K16
C 1514	(A,92,44)	CKSQYB105K16
C 1515	(A,78,47)	CKSRYB103K50
C 1516	(A,82,52)	CEVW220M16
C 1517	(A,61,40)	CEVW100M16
C 1551	(B,91,43)	CCSRCH7R0D50
C 1552	(B,79,35)	CKSRYB222K50
C 1553	(B,79,31)	CKSRYB222K50
C 1554	(B,76,48)	CKSRYB222K50
C 1555	(B,74,46)	CKSRYB222K50
C 1556	(B,76,56)	CCSRCJ3R0C50

Circuit Symbol and No.	Part No.
C 1557 (A,92,54)	CEVW101M16
C 1558 (B,77,52)	CKSRYB103K50
C 1559 (B,75,36)	CKSQYB225K10
C 1560 (B,75,30)	CKSQYB225K10
C 1561 (A,70,49)	CEVW100M16
C 1562 (A,65,49)	CEVW100M16
C 1563 (B,96,45)	CKSYB475K16
C 1564 (A,71,56)	CKSYB475K16
C 1565 (A,98,40)	CKSRYB103K50
C 1566 (A,74,60)	CKSRYB103K50
C 1567 (A,103,35)	CEVW470M16
C 1568 (A,75,65)	CEVW470M16
C 1569 (A,102,48)	CEVW330M10
C 1570 (A,103,42)	CEVW101M4
C 1571 (A,63,64)	CEVW330M10
C 1572 (A,69,64)	CEVW101M4
C 1575 (B,80,47)	CKSRYB104K25
C 1576 (B,67,42)	CKSRYB104K25
C 1577 (A,76,51)	CEVW101M16
C 1580 (A,61,88) 22μF	CCG1183
C 1601 (B,119,101)	CKSRYB103K50
C 1602 (A,81,82)	CKSRYB104K16
C 1603 (A,91,120)	CKSRYB103K50
C 1604 (A,84,76)	CEVW100M16
C 1605 (A,87,79)	CKSRYB103K50
C 1606 (A,94,120)	CKSRYB222K50
C 1607 (A,87,81)	CKSRYB103K50
C 1610 (A,73,93)	CKSRYB102K50
C 1611 (A,95,95)	CKSRYB102K50
C 1612 (A,72,106)	CKSRYB102K50
C 1613 (A,82,113)	CKSRYB102K50
C 1614 (B,84,111)	CKSRYB105K10
C 1615 (A,90,115)	CKSRYB103K50
C 1616 (A,70,93)	CKSRYB104K16
C 1619 (A,102,90)	CKSRYB104K16
C 1620 (A,96,86)	CKSRYB104K16
C 1621 (A,94,117)	CKSRYB104K16
C 1622 (B,112,98)	CKSRYB103K50
C 1623 (B,111,105)	CKSRYB103K50
C 1801 (B,149,69)	CKSRYB222K50
C 1802 (B,139,67)	CKSRYB103K50
C 1803 (B,146,68)	CCSRCH220J50
C 1805 (A,123,76)	CEVW100M16
C 1806 (B,120,76)	CKSRYB473K50
C 1807 (A,129,78)	CEVW220M16
C 1808 (B,126,73)	CKSRYB103K50
C 1809 (B,132,72)	CKSRYB103K50
C 1810 (B,136,80)	CKSRYB473K50
C 1811 (B,114,73)	CKSRYB103K50
C 1812 (B,124,68)	CKSRYB224K16
C 1821 (A,11,118)	CKSRYB823K16
C 1822 (B,17,124)	CKSRYB104K25
C 1823 (B,17,122)	CKSRYB103K50
C 1824 (A,14,117)	CKSRYB104K16
C 1825 (B,23,122)	CKSRYB102K50
C 1826 (A,21,119)	CKSRYF104Z25
C 1862 (B,161,122)	CKSRYB103K50
C 1863 (B,163,111)	CKSYB106K6R3
C 1864 (B,168,98)	CKSRYB104K25
C 1865 (A,166,94)	CCSRCH102J50
C 1866 (A,173,96)	CKSRYB104K16
C 1867 (A,174,107)	CKSRYB105K10
C 1871 (B,161,87)	CKSRYF103Z50
C 1872 (A,146,77)	CKSRYB104K25
C 1873 (A,147,77)	CKSRYB334K10
C 1874 (A,163,90)	CKSRYF103Z50
C 1875 (A,153,79)	CEVW101M16
C 1876 (A,140,78)	CEVW470M16
C 1877 (A,154,91)	CKSRYB104K16
C 1878 (A,150,88)	CKSRYF104Z25
C 1879 (A,156,91)	CKSRYB474K10
C 1880 (A,144,77)	CKSRYB104K25
C 1881 (B,10,123)	CKSRYB104K25
C 1882 (A,146,88)	CEVW470M16
C 1901 (A,158,36)	CEVW101M16
C 1902 (A,145,46)	CEVW101M16
C 1903 (A,78,80)	CKSRYB104K16
C 1904 (B,132,41)	CKSRYB104K25
C 1905 (A,143,40)	CKSRYB103K50
C 1906 (A,161,30)	CKSRYB103K50
C 1907 (B,170,34)	CKSRYB103K50
C 1908 (A,166,31)	CEVW101M16
C 1910 (A,166,45)	CEVW101M16
C 1911 (B,168,61)	CKSRYB104K25
C 1912 (B,169,44)	CKSRYB103K50
C 1913 (B,170,56)	CKSRYB103K50
C 1914 (B,169,39)	CKSRYB103K50
C 1915 (A,166,53)	CEVW101M16
C 1916 (A,166,38)	CEVW101M16
C 1917 (A,155,46)	CEVW101M16
C 1918 (A,155,41)	CKSRYB103K50
C 1919 (A,165,74)	CEVW101M16
C 1920 (B,169,73)	CKSRYB103K50
C 1921 (B,169,69)	CKSRYB103K50
C 1922 (A,173,84)	CKSRYB104K16
C 1923 (A,166,65)	CEVW470M16
C 1924 (A,173,86)	CKSRYB103K50
C 1925 (A,172,91)	CEVW220M16
C 1950 (A,122,94)	CEVW101M16
C 1951 (B,108,85)	CKSRYB103K50
C 1952 (B,115,86)	CKSRYB103K50
C 1953 (A,127,87)	CEVW101M16
C 1954 (A,113,39)	CEVW101M16
C 1955 (B,112,44)	CKSRYB103K50
C 1956 (B,104,44)	CKSRYB103K50
C 1957 (A,111,47)	CEVW101M16
C 2813 (B,23,31)	CKSRYF104Z25
C 2814 (B,18,32)	CKSRYF104Z25
C 2831 (A,38,20)	CEVW100M16
C 2832 (A,39,13)	CEVW100M16
C 2833 (B,42,15)	CKSRYB222K50
C 2834 (B,44,6)	CKSRYB222K50
C 2837 (A,44,7)	CEVW100M16
C 2838 (A,29,20)	CEVW100M16
C 2839 (B,35,5)	CKSRYB222K50
C 2840 (B,33,15)	CKSRYB222K50
C 2843 (A,29,13)	CEVW100M16
C 2844 (A,34,7)	CEVW100M16
C 2845 (B,28,15)	CKSRYB222K50
C 2846 (B,28,5)	CKSRYB222K50
C 2849 (A,92,24)	CKSSYB102K50
C 2851 (B,23,33)	CKSRYF103Z50
C 2879 (A,96,21)	CEVW470M16
C 2880 (A,73,40)	CKSRYF104Z25
C 2886 (B,89,25)	CKSRYF104Z25
C 2887 (B,20,32)	CKSRYF104Z25

Monitor Unit
Consists of
Monitor PCB
Upper PCB
Inverter PCB

G H I

Unit Number:CWM9950(AVIC-N2/XU/UC)
Unit Number:CWM9949(AVIC-X1R/XU/EW)
Unit Name:Monitor Unit

MISCELLANEOUS

Circuit Symbol and No.	Part No.
IC 4001 (A,28,50) IC	TC90A64AF-P
IC 4061 (A,55,79) IC	TC7SH08FUS1
IC 4141 (A,62,38) IC	TC7SH08FUS1
IC 4142 (A,67,43) IC	TK15404AMI
IC 4151 (A,53,34) IC	NJM2138V
IC 4181 (A,45,18) IC	NJM082BV
IC 4212 (A,102,28) IC	TC7SH08FUS1
IC 4311 (A,11,33) IC	NJM062V
IC 4311 (A,11,33) IC	NJM062V
IC 4601 (A,77,31) IC	PE5413B
IC 4602 (A,67,10) IC	S-80835CNNB-B8U
IC 4651 (A,64,25) IC	S-93C46BR0I-J8T1
IC 4701 (A,106,68) IC	PD6340A
IC 4702 (A,137,76) IC	TC7SH08FUS1
IC 4841 (A,125,45) IC	R1130H251B
IC 4851 (A,134,21)	R1224N102H
IC 4861 (A,143,47) IC	MAX1748EUES1
IC 4901 (A,93,19) IC	NJM2903V
IC 5002 (B,5,14) IC	TC7SET08FUS1
IC 5003 (B,10,46) IC	OZ961ISN
IC 5004 (A,9,59) FET	SI6544DQ
IC 5005 (A,13,56) FET	SI6544DQ
Q 4002 (A,44,62) Transistor	2SC4617
Q 4101 (A,54,66) Transistor	2SC4617
Q 4102 (A,48,63) Transistor	2SA1774
Q 4103 (A,49,65) Transistor	2SC4617
Q 4111 (A,56,60) Transistor	2SC4617
Q 4112 (A,48,57) Transistor	2SA1774
Q 4113 (A,51,60) Transistor	2SC4617
Q 4121 (A,56,54) Transistor	2SC4617
Q 4122 (A,48,51) Transistor	2SA1774
Q 4123 (A,51,54) Transistor	2SC4617
Q 4131 (A,56,49) Transistor	2SC4617
Q 4132 (A,48,46) Transistor	2SA1774
Q 4133 (A,51,49) Transistor	2SC4617
Q 4151 (A,46,38) Transistor	UMZ1N
Q 4152 (A,39,35) Transistor	UMZ1N
Q 4153 (A,39,32) Transistor	UMZ1N
Q 4154 (A,54,26) Transistor	UMZ1N
Q 4155 (A,47,26) Transistor	UMZ1N
Q 4156 (A,39,26) Transistor	UMZ1N
Q 4182 (A,39,21) Transistor	UMX2N
Q 4183 (A,39,16) Transistor	UMT2N
Q 4603 (A,98,26) Transistor	2SC4617
Q 4681 (A,11,7) Transistor	IMD3A
Q 4682 (A,11,11) Transistor	IMD3A
Q 4683 (A,11,15) Transistor	FMG12
Q 4741 (A,119,60) Transistor	DTA123JK
Q 4742 (A,119,56) Transistor	DTC124EK
Q 4831 (A,148,28) Transistor	2SB1260
Q 4832 (A,141,22) Transistor	DTC114EK
Q 4833 (A,140,18) Transistor	2SC4617
Q 4835 (A,100,45) Transistor	2SD1664
Q 4851 (A,131,26) FET	CPH6316
Q 5001 (B,12,33) Transistor	2SC4617
Q 5002 (B,13,36) Transistor	2SC4617
Q 5003 (B,8,36) Transistor	DTA144EE
Q 5004 (B,6,35) Transistor	2SC4617
Q 5011 (B,10,10) Transistor	2SC4097
Q 5020 (B,9,64) Transistor	2SC4617
Q 5101 (B,12,69) Transistor	2SC4617
Q 5102 (B,11,67) Transistor	2SC4617
Q 5103 (B,10,62) Transistor	2SA1774
Q 5105 (B,7,67) Transistor	UMX2N
D 4301 (A,5,132) Diode	DAN202U
D 4311 (A,11,37) Diode	AM-30-21
D 4321 (A,9,119) LED	CL-490S-WF-SD
D 4322 (A,9,50) LED	CL-490S-WF-SD
D 4355 (A,10,160) LED	CL-190UB2-X
D 4356 (A,10,148) LED	CL-190UB2-X
D 4357 (A,10,21) LED	CL-190UB2-X
D 4358 (A,10,9) LED	CL-190UB2-X
D 4601 (A,99,32) Diode	RB500V-40
D 4681 (A,14,13) Diode	MA111
D 4682 (A,13,18) Diode	MA111
D 4683 (A,10,20) Diode	UDZS5R6(B)
D 4684 (A,10,25) Diode	UDZS5R6(B)
D 4701 (A,114,77) Diode	UDZS5R6(B)
D 4702 (A,113,77) Diode	UDZS5R6(B)
D 4703 (A,121,73) Diode	UDZS5R6(B)
D 4704 (A,119,73) Diode	UDZS5R6(B)
D 4705 (A,102,79) Diode	UDZS5R6(B)
D 4706 (A,100,79) Diode	UDZS5R6(B)
D 4831 (A,142,19) Diode	UDZS22(B)
D 4835 (A,104,41) Diode	UDZS5R6(B)
D 4852 (A,131,31) Diode	U2FWJ44N
D 4861 (A,135,50) Diode	RB160M-30
D 4862 (A,137,57) Diode	RB500V-40
D 4863 (A,139,57) Diode	RB500V-40
D 4864 (A,141,57) Diode	RB500V-40
D 4865 (A,143,57) Diode	RB500V-40
D 4866 (A,145,57) Diode	RB500V-40
D 4867 (A,146,56) Diode	RB500V-40
D 4868 (A,148,56) Diode	RB500V-40
D 4869 (A,150,56) Diode	RB500V-40
D 5001 (B,11,31) Diode	UDZS6R8(B)
D 5003 (A,13,45) LED	CL-195PG-CD
D 5004 (A,13,42) LED (EW)	CL-195SR-CD
D 5005 (A,13,31) LED	CL-195PG-CD
D 5006 (A,13,28) LED (EW)	CL-195SR-CD

Circuit Symbol and No.		Part No.
D 5007	(A,13,16) LED	CL-190UB2-X
D 5008	(A,13,10) LED	CL-190UB2-X
D 5009	(A,11,42) Diode	RB751V40
D 5010	(A,17,53) Diode	UDZS6R2(B)
D 5011	(A,7,56) Diode	UDZS6R2(B)
D 5012	(B,6,71) Diode	UDZS6R2(B)
D 5013	(B,18,69) Diode	MA147
D 5014	(B,6,74) Diode	MA147
D 5016	(B,16,10) Diode	UDZS5R6(B)
D 5030	(A,16,19) Diode (EW)	DAN202U
D 5101	(B,15,67) Diode	UDZS8R2(B)
L 4001	(A,17,38) Inductor	CTF1306
L 4002	(A,21,36) Inductor	CTF1306
L 4003	(A,26,36) Inductor	CTF1306
L 4004	(A,27,36) Inductor	CTF1306
L 4005	(A,28,65) Inductor-Array	CTF1421
L 4006	(A,23,65) Inductor-Array	CTF1421
L 4008	(A,26,65) Inductor	CTF1306
L 4009	(A,23,37) Inductor	CTF1306
L 4011	(A,19,36) Inductor	CTF1306
L 4012	(A,24,36) Ferrite Bead	CTF1528
L 4013	(A,30,63) Ferrite Bead	CTF1528
L 4014	(A,24,63) Ferrite Bead	CTF1528
L 4015	(A,20,64) Inductor	CTF1306
L 4016	(A,16,47) Ferrite Bead	CTF1528
L 4017	(A,28,37) Inductor	CTF1306
L 4071	(A,50,69) Inductor	LCYA100J2520
L 4074	(A,45,41) Inductor	LCYA100J2520
L 4075	(A,53,70) Inductor	LCYA100J2520
L 4078	(A,43,68) Inductor	LCYA100J2520
L 4079	(A,41,68) Inductor	CTF1306
L 4081	(A,51,75) Inductor	LCYC2R2K2125
L 4101	(A,121,37) Inductor	LCYA100J2520
L 4141	(A,71,63) Inductor	LCYA100J2520
L 4151	(A,62,31) Inductor	LCYA100J2520
L 4152	(A,61,18) Inductor	LCYA100J2520
L 4181	(A,57,19) Coil	LCYA101J2520
L 4182	(A,57,16) Coil	LCYA101J2520
L 4311	(A,6,38) Inductor	LCYA100J2520
L 4311	(A,6,38) Inductor	LCYA100J2520
L 4601	(A,83,14) Inductor	LCYA100J2520
L 4701	(A,119,63) Inductor	LCYA100J2520
L 4801	(A,20,31) Inductor	LCYA100J2520
L 4802	(A,23,30) Inductor	LCYA100J2520
L 4803	(A,27,30) Inductor	LCYA100J2520
L 4804	(A,30,30) Inductor	LCYA100J2520
L 4841	(A,126,37) Choke Coil 10μH	CTH1249
L 4851	(A,142,28) Choke Coil 10μH	CTH1259
L 4852	(A,126,26) Choke Coil 18μH	CTH1250
L 4861	(A,137,37) Choke Coil 10μH	CTH1249
L 4862	(A,136,46) Choke Coil 6.8μH	CTH1248
L 4863	(A,137,62) Inductor	LCTC100K1608
L 4864	(A,130,55) Inductor	LCYA100J2520
L 4865	(A,149,65) Inductor	LCYA100J2520
L 4901	(A,92,27) Inductor	LCYA2R2J2520
T 5001	(A,9,80) Transformer	CTT1103
TH4601	(A,145,82) Thermistor	CCX1051
X 4001	(A,35,68) Crystal Resonator 42MHz	CSS1604
X 4601	(A,76,18) Radiator 12.58MHz	CSS1601
X 4701	(A,107,78) Ceramic Resonator 4.97MHz	CSS1573

Circuit Symbol and No.		Part No.
S 4351	(A,12,160) Push Switch	CSG1111
S 4352	(A,12,148) Push Switch	CSG1111
S 4353	(A,12,21) Push Switch	CSG1111
S 4354	(A,12,9) Push Switch	CSG1111
S 5001	(A,18,43) Push Switch	CSG1111
S 5002	(A,18,29) Push Switch	CSG1111
S 5003	(A,18,13) Push Switch	CSG1111
VR5001	(A,8,43) Semi-fixed 15kΩ(B)	CCP1490
⚠FU4831	(A,117,10) Fuse 630mA	CEK1252
⚠FU5001	(B,7,24) Fuse 1.25A	CEK1255

RESISTORS

R 4001	(A,26,33)	RS1/16S101J
R 4002	(A,20,34)	RS1/16S470J
R 4003	(A,28,34)	RS1/16S101J
R 4004	(A,33,34)	RS1/16S101J
R 4005	(A,43,43)	RS1/16S473J
R 4006	(A,45,45)	RS1/16S392J
R 4009	(A,44,60)	RS1/16S152J
R 4010	(A,42,65)	RS1/16S331J
R 4012	(A,33,63)	RS1/16SS105J
R 4013	(A,34,64)	RS1/16S391J
R 4014	(A,28,69)	RAB4C101J
R 4015	(A,25,69)	RS1/16S473J
R 4018	(A,22,69)	RS1/16S101J
R 4022	(A,20,66)	RS1/16S101J
R 4023	(A,18,72)	RS1/16S0R0J
R 4024	(A,17,62)	RS1/16S333J
R 4025	(A,15,39)	RS1/16S101J
R 4026	(A,30,35)	RS1/16S101J
R 4027	(A,16,37)	RS1/16S101J
R 4030	(A,18,33)	RS1/16S101J
R 4031	(A,29,34)	RS1/16S101J
R 4061	(A,64,81)	RS1/16S473J
R 4062	(A,63,78)	RS1/16S152J
R 4063	(A,58,80)	RS1/16S0R0J
R 4064	(A,57,82)	RS1/16S0R0J
R 4084	(A,20,74)	RS1/16S473J
R 4085	(A,22,74)	RS1/16S473J
R 4086	(A,22,70)	RS1/16S473J
R 4087	(A,40,75)	RS1/16S104J
R 4088	(A,43,81)	RS1/16S104J
R 4089	(A,45,82)	RS1/16S104J
R 4101	(A,57,66)	RS1/16S8201F
R 4102	(A,57,63)	RS1/16S5602F
R 4103	(A,55,63)	RS1/16S681J
R 4104	(A,53,64)	RS1/16S331J
R 4105	(A,105,11)	RS1/16S104J
R 4107	(A,61,65)	RS1/16S6801D
R 4108	(A,51,66)	RS1/16S331J
R 4109	(A,49,63)	RS1/16S391J
R 4110	(A,47,66)	RS1/16S391J
R 4111	(A,58,60)	RS1/16S153J
R 4112	(A,58,57)	RS1/16S104J
R 4113	(A,57,57)	RS1/16S681J
R 4114	(A,54,59)	RS1/16S331J
R 4115	(A,102,13)	RS1/16S75R0D
R 4118	(A,54,60)	RS1/16S331J
R 4119	(A,50,57)	RS1/16S391J

Circuit Symbol and No.		Part No.
R 4120	(A,49,60)	RS1/16S391J
R 4121	(A,58,54)	RS1/16S153J
R 4122	(A,58,51)	RS1/16S104J
R 4123	(A,57,51)	RS1/16S681J
R 4124	(A,54,53)	RS1/16S331J
R 4125	(A,103,14)	RS1/16S75R0D
R 4128	(A,54,54)	RS1/16S331J
R 4129	(A,50,51)	RS1/16S391J
R 4130	(A,49,54)	RS1/16S391J
R 4131	(A,58,49)	RS1/16S153J
R 4132	(A,58,46)	RS1/16S104J
R 4133	(A,57,46)	RS1/16S681J
R 4134	(A,54,47)	RS1/16S331J
R 4135	(A,105,15)	RS1/16S75R0D
R 4138	(A,54,49)	RS1/16S331J
R 4139	(A,50,46)	RS1/16S391J
R 4140	(A,49,49)	RS1/16S391J
R 4141	(A,64,42)	RS1/16S105J
R 4142	(A,62,43)	RS1/16S224J
R 4145	(A,64,46)	RS1/16S1501D
R 4146	(A,66,45)	RS1/16S5602F
R 4147	(A,65,38)	RS1/16S3302F
R 4148	(A,65,37)	RS1/16S1002F
R 4150	(A,39,30)	RS1/16S183J
R 4152	(A,48,35)	RS1/16S3901F
R 4153	(A,45,35)	RS1/16S1501F
R 4154	(A,54,30)	RS1/16S102J
R 4155	(A,51,30)	RS1/16S102J
R 4156	(A,45,32)	RS1/16S1501F
R 4157	(A,48,31)	RS1/16S3901F
R 4160	(A,60,37)	RS1/16S1002F
R 4161	(A,60,35)	RS1/16S1802F
R 4162	(A,57,30)	RS1/16S102J
R 4163	(A,55,38)	RS1/16S3901F
R 4164	(A,52,38)	RS1/16S1501F
R 4165	(A,49,38)	RS1/16S102J
R 4166	(A,44,38)	RS1/16S272J
R 4167	(A,42,35)	RS1/16S102J
R 4168	(A,37,35)	RS1/16S272J
R 4169	(A,42,32)	RS1/16S102J
R 4170	(A,37,32)	RS1/16S272J
R 4171	(A,52,26)	RS1/16S331J
R 4172	(A,59,26)	RS1/16S103J
R 4174	(A,44,27)	RS1/16S331J
R 4175	(A,48,24)	RS1/16S103J
R 4177	(A,36,27)	RS1/16S331J
R 4178	(A,42,24)	RS1/16S103J
R 4180	(A,35,29)	RS1/16S243J
R 4181	(A,42,23)	RS1/16S3002F
R 4182	(A,47,22)	RS1/16S223J
R 4183	(A,45,22)	RS1/16S1203F
R 4184	(A,47,19)	RS1/16S1602F
R 4185	(A,48,15)	RS1/16S1502F
R 4186	(A,42,21)	RS1/16S1002F
R 4187	(A,42,18)	RS1/16S1002F
R 4188	(A,42,16)	RS1/16S101J
R 4189	(A,37,19)	RS1/16S153J
R 4190	(A,41,21)	RS1/16S100J
R 4191	(A,35,14)	RS1/16S153J
R 4192	(A,42,14)	RS1/16S100J

Circuit Symbol and No.		Part No.
R 4193	(A,37,14)	RS1/16S0R0J
R 4194	(A,39,18)	RS1/16S0R0J
R 4208	(A,124,72)	RS1/16S101J
R 4209	(A,123,69)	RS1/16S101J
R 4211	(A,103,22)	RS1/16S681J
R 4311	(A,13,30)	RS1/16S275J
R 4312	(A,15,30)	RS1/16S105J
R 4313	(A,7,33)	RS1/16SS393J
R 4314	(A,8,31)	RS1/16S103J
R 4315	(A,15,45)	RS1/16SS121J
R 4321	(A,14,124)	RS1/16SS121J
R 4322	(A,9,124)	RS1/16SS121J
R 4323	(A,8,44)	RS1/16SS121J
R 4324	(A,10,44)	RS1/16SS121J
R 4359	(A,8,139)	RS1/16SS181J
R 4360	(A,8,140)	RS1/16SS121J
R 4361	(A,8,141)	RS1/16SS121J
R 4362	(A,8,142)	RS1/16SS121J
R 4363	(A,4,129)	RS1/16SS181J
R 4364	(A,6,129)	RS1/16SS121J
R 4365	(A,11,26)	RS1/16SS121J
R 4366	(A,10,27)	RS1/16SS121J
R 4453	(A,138,72)	RS1/16S101J
R 4454	(A,138,71)	RS1/16S101J
R 4601	(A,104,23)	RS1/16S473J
R 4602	(A,106,28)	RS1/16S473J
R 4603	(A,79,17)	RS1/16S473J
R 4604	(A,89,27)	RS1/16SS471J
R 4605	(A,71,19)	RS1/16SS471J
R 4606	(A,89,30)	RAB4CQ471J
R 4607	(A,89,33)	RAB4CQ471J
R 4608	(A,88,35)	RS1/16SS471J
R 4610	(A,77,42)	RS1/16SS471J
R 4611	(A,83,42)	RS1/16S470J
R 4612	(A,78,42)	RS1/16S470J
R 4613	(A,81,42)	RS1/16S272J
R 4614	(A,80,42)	RS1/16S272J
R 4615	(A,71,15)	RS1/16SS471J
R 4616	(A,73,15)	RS1/16S104J
R 4617	(A,73,13)	RS1/16S473J
R 4618	(A,88,28)	RS1/16SS471J
R 4619	(A,97,29)	RS1/16S473J
R 4621	(A,98,29)	RS1/16S223J
R 4622	(A,95,33)	RS1/16S473J
R 4623	(A,99,29)	RS1/16S0R0J
R 4624	(A,87,42)	RAB4CQ473J
R 4625	(A,65,12)	RS1/16S103J
R 4626	(A,67,29)	RS1/16S473J
R 4627	(A,83,17)	RAB4CQ472J
R 4628	(A,65,14)	RS1/16S0R0J
R 4629	(A,84,42)	RS1/16S473J
R 4630	(A,64,16)	RS1/16S0R0J
R 4631	(A,82,21)	RAB4CQ471J
R 4642	(A,68,14)	RS1/16S473J
R 4646	(A,69,18)	RS1/16S473J
R 4650	(A,66,29)	RS1/16SS471J
R 4651	(A,67,33)	RAB4CQ471J
R 4652	(A,67,35)	RS1/16SS471J
R 4655	(A,77,46)	RS1/16S102J
R 4657	(A,66,28)	RS1/16SS0R0J

Circuit Symbol and No.		Part No.
R 4670	(A,85,19)	RS1/16S1502D
R 4681	(A,10,23)	RS1/16S104J
R 4682	(A,10,19)	RS1/16S104J
R 4683	(A,13,22)	RS1/16S102J
R 4684	(A,13,20)	RS1/16S102J
R 4701	(A,116,74)	RS1/16S101J
R 4702	(A,116,73)	RS1/16S101J
R 4703	(A,98,79)	RS1/16S101J
R 4704	(A,98,78)	RS1/16S101J
R 4705	(A,111,77)	RS1/16S471J
R 4707	(A,116,69)	RS1/16S0R0J
R 4709	(A,106,58)	RS1/16SS472J
R 4711	(A,134,74)	RS1/16S471J
R 4741	(A,106,83)	RS1/16S0R0J
R 4742	(A,115,80)	RS1/16S0R0J
R 4743	(A,101,83)	RS1/16S473J
R 4802	(A,17,21)	RS1/16S0R0J
R 4803	(A,35,20)	RS1/16S333J
R 4804	(A,52,29)	RS1/16S0R0J
R 4805	(A,45,24)	RS1/16S0R0J
R 4806	(A,37,24)	RS1/16S0R0J
R 4831	(A,147,24)	RS1/16S153J
R 4832	(A,143,23)	RS1/16S472J
R 4833	(A,145,23)	RS1/16S472J
R 4834	(A,144,19)	RS1/16S103J
R 4835	(A,104,45)	RS1/16S121J
R 4851	(A,135,23)	RS1/16S5102D
R 4852	(A,137,22)	RS1/16S2202D
R 4853	(A,137,25)	RS1/16S272J
R 4854	(A,131,19)	RS1/16S100J
R 4855	(A,135,17)	RS1/16S102J
R 4858	(A,132,23)	RS1/16S560J
R 4859	(A,128,30)	RS1/16S100J
R 4861	(A,140,44)	RS1/16S104J
R 4862	(A,136,42)	RS1/16S102J
R 4863	(A,140,47)	RS1/16S1102F
R 4864	(A,138,41)	RS1/16S2001F
R 4865	(A,148,40)	RS1/16S3302F
R 4866	(A,146,41)	RS1/16S2401F
R 4867	(A,147,44)	RS1/16S5602F
R 4868	(A,149,42)	RS1/16S2703F
R 4869	(A,148,44)	RS1/16S5602F
R 4901	(A,95,25)	RS1/16S103J
R 4902	(A,91,14)	RS1/16S103J
R 4903	(A,87,20)	RS1/16S392J
R 4904	(A,89,20)	RS1/16S912J
R 4905	(A,87,17)	RS1/16S2003F
R 4906	(A,93,17)	RS1/16S153J
R 4907	(A,89,17)	RS1/16S153J
R 5001	(A,14,25) (EW)	RAB4CQ181J
R 5002	(A,17,35)	RAB4CQ151J
R 5003	(B,15,33)	RS1/16S103J
R 5004	(A,17,9)	RAB4CQ151J
R 5005	(B,14,32)	RS1/16S104J
R 5006	(B,5,33)	RS1/16S102J
R 5007	(B,11,37)	RS1/16S473J
R 5008	(B,7,32)	RS1/16S473J
R 5009	(B,12,40)	RS1/16S105J
R 5010	(B,8,38)	RS1/16S333J
R 5011	(B,4,44)	RS1/16S513J

Circuit Symbol and No.		Part No.
R 5014	(A,8,14)	RS1/16S102J
R 5015	(B,18,67)	RS1/16S105J
R 5016	(A,12,48)	RS1/16S563J
R 5017	(A,17,51)	RS1/16S103J
R 5018	(A,8,55)	RS1/16S103J
R 5019	(B,6,70)	RS1/16S511J
R 5020	(B,6,68)	RS1/16S821J
R 5022	(A,16,24)	RS1/16SS181J
R 5023	(A,14,8)	RS1/16SS0R0J
R 5024	(A,15,24) (EW)	RS1/16SS151J
R 5030	(A,19,18) (UC)	RS1/16S470J
R 5031	(B,13,9)	RS1/16S332J
R 5101	(B,6,63)	RS1/16S101J
R 5102	(B,11,64)	RS1/16S103J
R 5103	(B,6,64)	RS1/16S471J
R 5104	(B,9,69)	RS1/16S101J
R 5105	(B,14,67)	RS1/16S104J
R 5106	(B,14,65)	RS1/16S103J
R 5107	(B,12,63)	RS1/16S473J
R 5108	(B,10,69)	RS1/16S101J
R 5109	(A,7,15)	RS1/16S824J

CAPACITORS

C 4001	(A,19,37)	CKSRYB105K6R3
C 4002	(A,24,37)	CKSSYF104Z16
C 4003	(A,31,37)	CKSSYF104Z16
C 4004	(A,33,37)	CKSSYF104Z16
C 4005	(A,32,36)	CKSSYF104Z16
C 4006	(A,34,37)	CKSSYF104Z16
C 4007	(A,36,37)	CKSSYF104Z16
C 4008	(A,38,38)	CKSSYF104Z16
C 4009	(A,40,37)	CKSSYF104Z16
C 4010	(A,39,38)	CKSSYF104Z16
C 4011	(A,41,41)	CKSSYF104Z16
C 4012	(A,40,43)	CKSSYF104Z16
C 4013	(A,42,45)	CKSRYB392K50
C 4015	(A,47,44)	CKSRYB105K6R3
C 4016	(A,40,47)	CKSSYF104Z16
C 4017	(A,41,48)	CKSSYF104Z16
C 4018	(A,44,47)	CKSRYB104K16
C 4019	(A,44,49)	CKSRYB104K16
C 4020	(A,44,52)	CKSRYB104K16
C 4021	(A,40,51)	CKSSYF104Z16
C 4022	(A,46,55)	CKSSYF104Z16
C 4023	(A,45,55)	CKSSYF104Z16
C 4024	(A,44,55)	CKSSYF104Z16
C 4025	(A,41,52)	CKSSYF104Z16
C 4026	(A,41,53)	CKSSYF104Z16
C 4027	(A,41,54)	CKSSYF104Z16
C 4028	(A,41,55)	CKSSYF104Z16
C 4029	(A,41,56)	CKSSYF104Z16
C 4030	(A,44,57)	CKSRYB104K16
C 4031	(A,43,55)	CKSSYF104Z16
C 4032	(A,41,57)	CKSSYF104Z16
C 4033	(A,41,58)	CKSSYF104Z16
C 4034	(A,41,59)	CKSSYF104Z16
C 4035	(A,43,63)	CKSRYB103K50
C 4036	(A,44,58)	CCSRCH4R0C50
C 4037	(A,39,61)	CKSSYF104Z16

Circuit Symbol and No.		Part No.
C 4040	(A,39,62)	CKSSYF104Z16
C 4042	(A,37,63)	CCSRCH181J50
C 4045	(A,36,65)	CCSRCH9R0D50
C 4046	(A,34,65)	CCSRCH9R0D50
C 4047	(A,31,63)	CKSSYF104Z16
C 4048	(A,30,62)	CKSSYF104Z16
C 4049	(A,25,62)	CKSSYF104Z16
C 4050	(A,20,63)	CKSRYB105K6R3
C 4051	(A,16,54)	CKSSYF104Z16
C 4052	(A,16,46)	CKSSYF104Z16
C 4054	(A,23,34)	CCSRCH101J50
C 4055	(A,16,65)	CKSRYF104Z25
C 4061	(A,53,80)	CKSRYF104Z25
C 4062	(A,63,81)	CCSRCH390J50
C 4071	(A,47,70)	CSZS100M10
C 4074	(A,43,41)	CKSRYB105K6R3
C 4075	(A,49,72)	CKSRYB105K6R3
C 4101	(A,63,64)	CKSYF106Z10
C 4102	(A,53,63)	CCSRCH470J50
C 4103	(A,51,63)	CCSRCH470J50
C 4104	(A,56,66)	CKSRYF104Z25
C 4105	(A,59,64)	CSZS100M10
C 4107	(A,65,64)	CKSYF106Z10
C 4111	(A,63,57)	CKSYF106Z10
C 4112	(A,54,57)	CCSRCH470J50
C 4113	(A,51,57)	CCSRCH470J50
C 4114	(A,60,59)	CKSRYF104Z25
C 4121	(A,63,53)	CKSYF106Z10
C 4122	(A,54,51)	CCSRCH470J50
C 4123	(A,51,51)	CCSRCH470J50
C 4124	(A,60,54)	CKSRYF104Z25
C 4131	(A,63,49)	CKSYF106Z10
C 4132	(A,54,46)	CCSRCH470J50
C 4133	(A,51,46)	CCSRCH470J50
C 4134	(A,60,49)	CKSRYF104Z25
C 4140	(A,67,47)	CKSQYB225K10
C 4141	(A,64,43)	CKSRYB105K6R3
C 4142	(A,62,40)	CKSRYF104Z25
C 4143	(A,63,59)	CSZS100M10
C 4144	(A,65,40)	CKSRYF104Z25
C 4145	(A,68,40)	CKSRYF104Z25
C 4151	(A,59,32)	CSZSR220M16
C 4152	(A,48,33)	CKSRYB103K50
C 4153	(A,47,35)	CCSRCH4R0C50
C 4154	(A,47,31)	CCSRCH4R0C50
C 4155	(A,54,38)	CCSRCH4R0C50
C 4156	(A,58,37)	CKSRYF104Z25
C 4160	(A,44,35)	CKSRYF104Z25
C 4161	(A,44,32)	CKSRYF104Z25
C 4162	(A,51,38)	CKSRYF104Z25
C 4163	(A,57,28)	CKSRYB105K6R3
C 4164	(A,50,28)	CKSRYB105K6R3
C 4165	(A,42,28)	CKSRYB105K6R3
C 4166	(A,39,28)	CKSRYF104Z25
C 4167	(A,47,28)	CKSRYF104Z25
C 4168	(A,55,29)	CKSRYF104Z25
C 4169	(A,35,31)	CKSRYB103K50
C 4170	(A,58,23)	CSZSR220M16
C 4171	(A,55,23)	CSZSR220M16
C 4181	(A,51,21)	CSZSR220M16

Circuit Symbol and No.		Part No.
C 4182	(A,49,19)	CKSRYF104Z25
C 4183	(A,52,17)	CSZSR4R7M25
C 4184	(A,49,17)	CKSRYF104Z25
C 4186	(A,49,22)	CKSRYF104Z25
C 4188	(A,47,17)	CKSRYF104Z25
C 4225	(A,103,25)	CKSRYF104Z25
C 4311	(A,11,30)	CKSRYB224K16
C 4312	(A,9,28)	CKSRYB104K16
C 4313	(A,7,28)	CKSRYB104K16
C 4314	(A,6,35)	CKSRYB104K16
C 4315	(A,6,31)	CKSRYB104K16
C 4321	(A,11,123)	CKSRYB104K16
C 4322	(A,10,45)	CKSRYB104K16
C 4375	(A,11,156)	CKSRYB104K16
C 4376	(A,10,144)	CKSRYB104K16
C 4377	(A,9,25)	CKSRYB104K16
C 4378	(A,11,13)	CKSRYB104K16
C 4601	(A,77,14)	CSZSR330M10
C 4602	(A,79,20)	CKSRYF104Z25
C 4603	(A,65,10)	CKSRYF104Z25
C 4605	(A,74,20)	CKSRYF104Z25
C 4621	(A,68,12)	CKSRYB103K50
C 4631	(A,74,6) 10µF	CCG1138
C 4632	(A,78,6) 10µF	CCG1138
C 4651	(A,61,21)	CKSRYF104Z25
C 4670	(A,144,83)	CKSSYF104Z16
C 4681	(A,13,25)	CKSRYB102K50
C 4682	(A,13,23)	CKSRYB102K50
C 4683	(A,10,17)	CKSRYB102K50
C 4684	(A,10,22)	CKSRYB102K50
C 4685	(A,88,25)	CKSRYB102K50
C 4686	(A,87,23)	CKSRYB102K50
C 4687	(A,15,7)	CKSRYF104Z25
C 4701	(A,119,66)	CSZSR330M10
C 4702	(A,105,59)	CKSSYF104Z16
C 4704	(A,135,78)	CKSRYF104Z25
C 4801	(A,21,26)	CSZSR4R7M25
C 4802	(A,20,22)	CKSRYF104Z25
C 4803	(A,25,26)	CSZS100M10
C 4804	(A,23,22)	CKSRYF104Z25
C 4805	(A,29,25)	CSZSR330M10
C 4806	(A,26,22)	CKSRYF104Z25
C 4807	(A,32,26)	CSZSR33M35
C 4808	(A,32,23)	CKSRYF104Z25
C 4809	(A,21,31)	CKSSYF104Z16
C 4810	(A,25,31)	CKSSYF104Z16
C 4831	(A,28,31)	CKSSYF104Z16
C 4832	(A,32,31)	CKSRYF104Z25
C 4835	(A,102,41)	CKSRYF104Z25
C 4836	(A,95,47)	CKSRYF104Z25
C 4841	(A,126,41)	CKSRYB105K6R3
C 4843	(A,126,49) 68µF/6.3V	CCH1440
C 4844	(A,126,52)	CKSRYF104Z25
C 4851	(A,146,31)	CKSRYB104K16
C 4852	(A,124,32) 68µF/6.3V	CCH1440
C 4853	(A,122,31)	CKSRYB104K16
C 4855	(A,134,30) 10µF	CCG1138
C 4856	(A,127,32)	CCSRCH102J50
C 4857	(A,135,25)	CCSRCH681J50
C 4858	(A,138,30) 10µF	CCG1138

Circuit Symbol and No.		Part No.
C 4859	(A,134,19)	CKSRYB224K16
C 4860	(A,131,40)	CKSYF106Z10
C 4861	(A,131,42)	CKSYF106Z10
C 4862	(A,140,41)	CCSRCH100D50
C 4863	(A,136,41)	CKSRYB683K16
C 4864	(A,143,42)	CKSRYB104K16
C 4865	(A,141,41)	CKSRYB471K50
C 4866	(A,147,47)	CKSRYB224K16
C 4867	(A,144,53)	CKSRYB104K16
C 4868	(A,143,53)	CKSRYB104K16
C 4869	(A,139,54)	CKSRYB104K16
C 4870	(A,141,54)	CKSRYB224K16
C 4871	(A,147,53)	CKSRYB224K16
C 4872	(A,149,53)	CKSRYB104K16
C 4873	(A,141,65)	CKSQYB105K16
C 4874	(A,139,64)	CKSQYB474K25
C 4875	(A,143,61)	CKSRYB104K16
C 4876	(A,141,61)	CKSQYB474K25
C 4877	(A,138,60)	CKSQYB105K16
C 4878	(A,131,53)	CKSRYB104K16
C 4879	(A,134,54) 33μF/10V	CCH1586
C 4881	(A,136,65)	CKSRYF104Z25
C 4882	(A,128,53)	CKSRYF104Z25
C 4883	(A,146,67)	CKSRYF104Z25
C 4884	(A,137,53)	CKSRYB104K16
C 4885	(A,142,37) 68μF/6.3V	CCH1440
C 4886	(A,150,58)	CKSRYF104Z25
C 4887	(A,147,58)	CKSRYF104Z25
C 4901	(A,92,15)	CKSRYF104Z25
C 4902	(A,98,23)	CSZSR220M10
C 4903	(A,88,15)	CFHXSQ562J16
C 4904	(A,91,23)	CSZSR330M10
C 4905	(A,90,16)	CKSRYB102K50
C 5001	(B,15,8)	CKSRYB104K16
C 5002	(B,8,11)	CKSRYB105K6R3
C 5003	(A,10,37)	CSZSR330M10
C 5004	(A,15,10)	CKSRYB104K16
C 5005	(B,13,38)	CKSRYB104K16
C 5006	(B,8,39)	CKSRYB104K16
C 5007	(B,15,43)	CKSRYB105K6R3
C 5008	(B,16,45)	CKSQYB335K6R3
C 5010	(A,15,16)	CKSRYB104K16
C 5011	(B,5,41)	CKSRYB332K50
C 5012	(B,10,41)	CKSRYB105K6R3
C 5013	(B,5,39)	CKSRYB152K50
C 5014	(B,6,12)	CKSRYB104K16
C 5015	(A,9,52)	CKSRYB473K50
C 5016	(B,14,41)	CKSRYB103K50
C 5017	(A,15,48)	CFHXSQ221J50
C 5018	(A,14,51)	CKSRYB473K50
C 5019	(B,13,55) 10μF	CCG1138
C 5020	(B,9,57) 10μF	CCG1138
C 5021	(A,15,59)	CKSQYB105K16
C 5022	(A,13,59)	CKSQYB105K16
C 5023	(A,10,100) 22pF	CCG1214
C 5024	(B,18,72)	CKSRYB223K50
C 5101	(B,8,62)	CKSRYB104K16
C 5102	(B,6,61)	CKSRYB104K16

Circuit Symbol and No.		Part No.

Consists of
Keyboard PCB
Panel PCB

BC

Unit Number:CWM9952(AVIC-N2/XU/UC)
Unit Number:CWM9951(AVIC-X1R/XU/EW)
Unit Name:Keyboard Unit

MISCELLANEOUS

IC 5501	(A,42,7) IC	SBX3050-01
D 5501	(B,64,11) LED (EW)	CL-195SR-CD
D 5504	(A,6,4) LED	CL-190UB2-X
D 5505	(A,6,18) LED	CL-190UB2-X
D 5509	(A,138,8) LED	CL-190UB2-X
D 5510	(A,29,8) LED	CL-190UB2-X
D 5512	(A,78,5) LED (EW)	CL-195SR-CD
D 5513	(A,77,5) LED	CL-195PG-CD
D 5514	(A,90,5) LED (EW)	CL-195SR-CD
D 5515	(A,53,5) LED	CL-195PG-CD
D 5516	(A,100,5) LED	CL-195PG-CD
D 5517	(A,102,5) LED (EW)	CL-195SR-CD
D 5518	(A,89,5) LED	CL-195PG-CD
D 5519	(A,114,5) LED (EW)	CL-195SR-CD
D 5520	(A,127,7) LED (EW)	CL-195SR-CD
D 5521	(A,113,5) LED	CL-195PG-CD
D 5522	(A,125,7) LED	CL-195PG-CD
D 5524	(A,21,12) LED	CL-190UB2-X
D 5526	(A,150,17) LED	CL-190UB2-X
D 5527	(B,39,6) Diode	UDZS6R8(B)
D 5529	(A,150,5) LED	CL-190UB2-X
D 5530	(A,164,11) LED	CL-190UB2-X
D 5531	(A,67,5) LED	CL-195SR-CD
D 5534	(A,65,5) LED	CL-195PG-CD
D 5536	(B,145,11) Diode (EW)	DAN202U
D 5537	(A,89,14) LED	CL-190UB2-X
D 5538	(A,54,5) LED (EW)	CL-195SR-CD
D 5540	(A,79,14) LED	CL-190UB2-X
D 5541	(B,99,10) Diode	1SS355
D 5542	(B,67,10) Diode	UDZS20(B)
D 5901	(A,61,4) LED	SML-010VT
S 5501	(A,118,4) Push Switch	CSG1111
S 5502	(A,94,4) Push Switch	CSG1111
S 5503	(A,105,4) Push Switch	CSG1111
S 5504	(A,29,4) Push Switch	CSG1111
S 5505	(A,58,4) Push Switch	CSG1111
S 5506	(A,138,4) Push Switch	CSG1111
S 5507	(A,126,4) Push Switch	CSG1111
S 5508	(A,70,4) Push Switch	CSG1111
S 5509	(A,82,4) Push Switch	CSG1111
S 5510	(A,11,11) Encoder(VOLUME)	CSD1106
S 5511	(A,156,11) Switch(SELECT)	CSX1075
S 5901	(A,104,21) Push Switch	CSG1111

RESISTORS

Circuit Symbol and No.		Part No.
R 5501	(B,97,6)	RS1/16SS121J
R 5502	(A,147,11)	RS1/16S202J
R 5503	(A,101,8)	RS1/16S392J
R 5504	(A,96,6)	RS1/16S123J
R 5505	(A,60,6)	RS1/16S122J
R 5506	(A,25,4)	RS1/16S202J
R 5507	(A,134,3)	RS1/16S122J
R 5508	(B,22,14)	RS1/16S151J
R 5509	(B,24,14)	RS1/16S151J
R 5510	(B,93,11) (EW)	RS1/16SS181J
R 5511	(B,60,11)	RS1/16SS121J
R 5512	(B,59,10)	RS1/16SS121J
R 5513	(A,144,3)	RS1/16S202J
R 5514	(A,144,4)	RS1/16S392J
R 5515	(A,156,19)	RS1/16S123J
R 5516	(A,132,3)	RS1/16S102J
R 5517	(A,67,8)	RS1/16S151J
R 5518	(B,62,15)	RS1/16S820J
R 5519	(B,57,10)	RS1/16SS121J
R 5520	(B,146,2)	RS1/16S151J
R 5521	(B,144,3)	RS1/16S151J
R 5522	(B,98,6)	RS1/16SS121J
R 5524	(B,145,7)	RS1/16SS121J
R 5525	(B,51,10)	RS1/16SS472J
R 5526	(B,97,11) (EW)	RS1/16SS0R0J
R 5527	(B,95,11) (EW)	RS1/16SS181J
R 5528	(B,94,11) (EW)	RS1/16SS181J
R 5529	(B,92,5)	RS1/16SS181J
R 5530	(B,95,6)	RS1/16SS121J
R 5531	(B,30,14)	RS1/16S151J
R 5532	(B,96,6)	RS1/16SS121J
R 5533	(A,133,5) (EW)	RS1/16S181J
R 5534	(B,144,7)	RS1/16SS121J
R 5535	(B,48,4)	RS1/16S470J
R 5536	(B,146,7)	RS1/16SS121J
R 5537	(A,133,3) (EW)	RS1/16S181J
R 5538	(B,147,7)	RS1/16SS121J
R 5539	(A,136,10) (EW)	RS1/16S181J
R 5540	(B,94,6)	RS1/16SS121J
R 5541	(B,146,8)	RS1/16SS121J
R 5542	(A,138,12) (EW)	RS1/16S181J
R 5543	(B,55,10)	RS1/16SS121J
R 5548	(A,129,6) (EW)	RS1/16S0R0J
R 5549	(A,148,11)	RS1/16S122J
R 5550	(B,22,10)	RS1/16S392J
R 5558	(B,64,5)	RS1/16S121J
R 5561	(B,65,5)	RS1/16S121J
R 5563	(B,44,7)	RS1/16S101J
R 5565	(B,67,5)	RS1/16S121J
R 5566	(A,161,4)	RS1/16SS151J
R 5568	(A,160,4)	RS1/16SS151J
R 5573	(B,68,5)	RS1/16S151J
R 5574	(B,96,11) (EW)	RS1/16SS181J
R 5575	(B,27,14)	RS1/16S151J
R 5585	(A,72,6)	RS1/16S181J
R 5587	(B,25,12)	RS1/16S151J
R 5588	(B,28,12)	RS1/16S151J
R 5589	(B,146,4)	RS1/16S151J
R 5590	(A,159,5)	RS1/16SS151J
R 5592	(B,62,13) (UC)	RS1/16S150J
R 5593	(A,140,12) (UC)	RS1/16S270J
R 5596	(B,68,13)	RS1/16SS121J
R 5597	(B,65,14)	RS1/16S820J
R 5598	(B,66,14)	RS1/16S121J
R 5599	(B,61,10)	RS1/16SS121J
R 5904	(A,61,7)	RS1/16S151J

CAPACITORS

C 5509	(B,36,3)	CSZSQ100M6R3
C 5516	(B,36,5)	CKSRYB103K50
C 5520	(A,42,3)	CKSYB106K6R3

P

Unit Number:CWX2960(AVIC-N2/XU/UC)
Unit Number:CWX2929(AVIC-X1R/XU/EW)
Unit Name:GPS Unit

MISCELLANEOUS

IC 401	IC	UPC2749T
IC 402	IC	UPB1027GS
IC 441	IC	NJM2100V
IC 461	IC	ADC12H034CIMSA
IC 501	IC	PD3390A
IC 502	IC (EW)	PD6472A
	IC (UC)	PD6473A
IC 503	IC	M5M5V216ATP-70HI
IC 504	IC	MAX6364PUT29
IC 532	IC (EW)	LC72720YVS
Q 441	Transistor	2SB1132
D 401	Diode	1SV314
D 501	Diode	RB751V40
L 401	Inductor	CTF1549
L 402	Inductor	CTF1486
L 403	Inductor	CTF1486
L 404	Inductor	LCSA3N3R1608
L 405	Inductor	LCYB22NJ1608
L 406	Inductor	LCYB22NJ1608
L 407	Inductor	CTF1410
L 408	Inductor (EW)	CTF1410
	Inductor (UC)	CTF1556
L 409	Inductor	LCTB1R0K2125
L 410	Inductor	CTF1547
L 412	Inductor	CTF1547
L 413	Inductor	CTF1547
L 414	Inductor	CTF1547
L 415	Inductor	CTF1547
L 416	Inductor	CTF1547
L 417	Inductor	CTF1547
L 418	Inductor	CTF1410
L 441	Inductor	CTF1410
L 442	Inductor	CTF1410
L 461	Inductor	CTF1410
L 462	Inductor	CTF1410
L 467	Inductor	CTF1547
L 468	Inductor	CTF1547
L 469	Inductor	CTF1410
L 501	Inductor	CTF1410
L 502	Inductor	CTF1410
L 503	Inductor	CTF1410
L 504	Inductor	CTF1410
L 531	Inductor	CTF1410

Circuit Symbol and No.		Part No.
X 401	TCXO 16.368MHz	CWX2381
X 501	Radiator 32.768kHz	CSS1319
X 502	Radiator 20.00MHz	CSS1549
X 532	Radiator 4.332MHz (EW)	CSS1550
F 401	Filter	CTF1548

RESISTORS

R 401		RS1/16SS472J
R 402		RS1/16SS472J
R 403		RS1/16SS122J
R 404		RS1/16SS622J
R 405		RS1/16SS100J
R 406		RS1/16S271J
R 407		RS1/16S2R2J
R 441		RN1/16SC10R0D
R 442		RN1/16SE1501D
R 443		RN1/16SE2402D
R 444		RN1/16SE3302D
R 445		RN1/16SE4702D
R 446		RN1/16SE4702D
R 447		RS1/16S432J
R 448		RN1/16SE1002D
R 449		RN1/16SE2202D
R 450		RN1/16SE3302D
R 451		RS1/16S103J
R 452		RS1/16SS102J
R 454		RS1/16SS102J
R 460		RS1/16S0R0J
R 461		RS1/16SS102J
R 462		RS1/16SS102J
R 463		RAB4CQ102J
R 464		RAB4CQ333J
R 465		RS1/16SS102J
R 468	(EW)	RS1/16SS471J
R 469	(EW)	RAB4CQ471J
R 470		RAB4CQ471J
R 471		RAB4CQ104J
R 477		RS1/16SS222J
R 478		RS1/16SS222J
R 479		RS1/16SS222J
R 480		RS1/16SS332J
R 481		RS1/16SS332J
R 482		RS1/16SS223J
R 483		RS1/16SS473J
R 501		RS1/16SS0R0J
R 502		RS1/16SS102J
R 503		RS1/16SS154J
R 508	(EW)	RS1/16SS472J
	(UC)	RS1/16SS103J
R 509		RS1/16SS473J
R 510		RS1/16SS102J
R 511		RS1/16SS103J
R 512		RS1/16SS473J
R 513		RS1/16SS103J
R 514		RS1/16SS473J
R 515		RS1/16SS473J
R 517		RS1/16SS103J
R 519		RS1/16SS473J
R 521		RS1/16SS473J

Circuit Symbol and No.		Part No.
R 532	(EW)	RS1/16SS104J
R 533	(EW)	RS1/16SS332J
	(UC)	RS1/16SS103J
R 534		RS1/16SS103J
R 535		RS1/16SS103J
R 536		RS1/16SS0R0J
R 537	(EW)	RS1/16S0R0J
R 538	(EW)	RS1/16SS0R0J

CAPACITORS

C 401		CCSRCH100D50
C 402		CCSSCH101J50
C 403		CKSSYB104K10
C 404		CCSSCH101J50
C 405		CCSRUJ220J50
C 406		CCSRUJ220J50
C 407		CKSSYB333K16
C 408		CKSSYB182K50
C 409		CSZS100M6R3
C 410		CKSSYB103K16
C 411		CKSSYB102K50
C 412		CKSSYB102K50
C 413		CKSSYB104K10
C 414		CKSSYB104K10
C 415		CKSSYB104K10
C 416		CKSSYB104K10
C 417		CKSSYB104K10
C 418		CKSSYB102K50
C 419		CKSSYB104K10
C 420		CKSSYB104K10
C 421		CKSSYB102K50
C 422		CKSSYB103K16
C 423		CKSSYB104K10
C 424		CCSRCH102J50
C 425		CCSRCH271J50
C 426		CCSRCH102J50
C 427		CKSSYB104K10
C 428		CKSSYB103K16
C 429		CCSRCH301J50
C 430		CCSSCH120J50
C 431		CCSRCH301J50
C 432		CKSSYB103K16
C 433		CCSRCH101J50
C 434		CKSSYB102K50
C 435		CKSSYB103K16
C 436		CKSSYB104K10
C 441		CKSRYB104K16
C 442		CCSRCH101J50
C 443		CKSRYB104K16
C 444		CKSSYB103K16
C 445		CKSSYB104K10
C 461	22μF/6.3V	CCH1408
C 462		CKSRYB104K16
C 463		CKSRYB104K16
C 464		CKSSYB103K16
C 465		CKSSYB103K16
C 466		CKSSYB103K16
C 467		CKSSYB103K16
C 468		CKSSYB104K10
C 469		CSZS100M10

Circuit Symbol and No.		Part No.
C 470		CKSSYB104K10
C 471		CCSSCH101J50
C 501		CKSSYB104K10
C 502		CCSRCH150J50
C 503		CCSRCH150J50
C 504		CKSSYB104K10
C 506		CKSSYB104K10
C 507		CKSSYB104K10
C 508		CKSSYB104K10
C 509		CKSSYB104K10
C 511		CKSSYB104K10
C 512		CKSSYB104K10
C 514		CSZS100M6R3
C 515		CKSSYB104K10
C 516		CKSSYB104K10
C 517		CKSSYB104K10
C 518		CKSSYB104K10
C 535	(EW)	CSZS100M6R3
C 539	(EW)	CCSRCH100D50
C 540	(EW)	CCSRCH100D50
C 541	(EW)	CCSRCH561J50
C 542	(EW)	CKSSYB104K10
C 543	(EW)	CSZS100M6R3
C 544	(EW)	CCSRCH331J50
C 545	(EW)	CKSSYB104K10

D

Unit Number:CWX2941
Unit Name:DVD Core Unit(MS3)

MISCELLANEOUS

IC 1101	IC	AN8703FH
IC 1201	IC	BA5985FM
IC 1202	IC	AN8471SAT1
IC 1301	IC	MNZS26EDCUB
IC 1401	IC	TC74LCX245FT
IC 1402	IC	TC7SH04FU
IC 1403	IC	TC74LCX244FT
IC 1405	IC	TC74LCX244FT
IC 1501	IC	K4S641632H-TC75
IC 1502	IC	TC74VCX74FT
IC 1503	IC	MN677531KAUB
IC 1504	IC	TC74VCX74FT
IC 1505	IC	TC7PA04FU
IC 1507	IC	SM8707FV
IC 1602	IC	NJM2100M
IC 1604	IC	NJM2100V
IC 1605	IC	PCM1742KE
IC 1701	IC	PE5395B
IC 1702	IC	M5M5V216ATP-70HI
IC 1705	IC	PD6474B
IC 1706	IC	TC7SH08FU
Q 1101	Transistor	2SB1260
Q 1102	Transistor	2SB1260
Q 1103	Transistor	UN2211
Q 1104	Transistor	2SB709A
Q 1105	Transistor	2SD601A
Q 1201	Transistor	DTC124EU
Q 1501	Transistor	2SA1037K

Circuit Symbol and No.		Part No.
D 1101	Diode	1SS355
D 1102	Diode	1SS355
D 1301	Diode	UDZ2R7(B)
D 1302	Chip LED	CL205IRXTU
L 1301	Inductor	CTF1409
L 1302	Inductor	CTF1394
L 1303	Inductor	CTF1395
L 1305	Inductor	CTF1409
L 1504	Inductor	CTF1394
L 1505	Inductor	CTF1409
L 1506	Inductor	CTF1473
L 1507	Inductor	CTF1473
L 1508	Inductor	CTF1473
L 1509	Inductor	CTF1399
L 1510	Inductor	CTF1409
L 1518	Inductor	CTF1385
L 1520	Inductor	CTF1399
L 1522	Inductor	CTF1395
L 1605	Inductor	CTF1379
L 1701	Inductor	CTF1395
L 1702	Inductor	CTF1409
L 1703	Inductor	CTF1473
L 1704	Inductor	CTF1473
X 1501	Radiator 27MHz	CSS1609
X 1701	Ceramic Resonator 4.97MHz	CSS1575
VR1502	Semi-Fixed 2.2kΩ(B)	CCP1444

RESISTORS

R 1101		RS1/16SS101J
R 1102		RS1/16SS3R9J
R 1103		RS1/16SS3R9J
R 1104		RS1/16SS3R9J
R 1105		RS1/16SS3R9J
R 1106		RS1/16SS330J
R 1107		RS1/16SS3R9J
R 1108		RS1/16SS3R9J
R 1109		RS1/16SS3R9J
R 1110		RS1/16SS3R9J
R 1111		RS1/16SS272J
R 1112		RS1/16SS472J
R 1113		RS1/16SS102J
R 1124		RS1/16SS273J
R 1125		RS1/16SS273J
R 1126		RS1/16SS224J
R 1130		RS1/16SS0R0J
R 1131		RS1/16SS0R0J
R 1132		RS1/16SS0R0J
R 1133		RS1/16S2402D
R 1134		RS1/16S1002D
R 1135		RS1/16S2702D
R 1140		RS1/16SS105J
R 1141		RS1/16SS105J
R 1142		RS1/16SS105J
R 1151		RS1/16SS103J
R 1152		RS1/16SS103J
R 1201		RS1/16SS221J
R 1202		RS1/16SS393J
R 1203		RS1/16SS303J
R 1205		RS1/16SS0R0J

Circuit Symbol and No.	Part No.
R 1206	RS1/16SS102J
R 1209	RS1/16SS221J
R 1210	RS1/16SS393J
R 1211	RS1/16SS393J
R 1212	RS1/16SS393J
R 1213	RS1/16SS393J
R 1214	RS1/16SS221J
R 1215	RS1/16SS1R0J
R 1216	RS1/16SS1R0J
R 1218	RS1/16SS221J
R 1219	RS1/16SS221J
R 1220	RS1/16SS221J
R 1221	RS1/16SS822J
R 1222	RS1/16SS822J
R 1223	RS1/16SS822J
R 1224	RS1/16SS563J
R 1225	RS1/16SS243J
R 1226	RS1/16SS473J
R 1227	RS1/16SS473J
R 1228	RS1/16SS1R0J
R 1229	RS1/16SS1R0J
R 1230	RS1/16SS1R0J
R 1232	RS1/16SS822J
R 1233	RS1/16SS243J
R 1234	RS1/16S391J
R 1235	RS1/16S471J
R 1236	RS1/16SS513J
R 1237	RS1/16SS513J
R 1301	RS1/16SS222J
R 1321	RS1/16SS104J
R 1322	RS1/16SS0R0J
R 1323	RS1/16SS221J
R 1324	RS1/16SS221J
R 1334	RS1/16SS221J
R 1336	RS1/16SS103J
R 1337	RS1/16SS103J
R 1338	RS1/16SS472J
R 1339	RS1/16SS273J
R 1340	RS1/16SS472J
R 1341	RS1/16SS273J
R 1342	RS1/16SS273J
R 1344	RS1/16SS273J
R 1349	RS1/16SS562J
R 1350	RS1/16SS242J
R 1352	RS1/16S2702D
R 1353	RS1/16SS102J
R 1360	RS1/16SS153J
R 1361	RS1/16SS105J
R 1362	RS1/16SS473J
R 1363	RS1/16SS101J
R 1364	RS1/16SS123J
R 1365	RS1/16SS101J
R 1367	RS1/16SS473J
R 1369	RS1/16SS473J
R 1375	RS1/16SS103J
R 1376	RS1/16SS103J
R 1377	RS1/16SS103J
R 1378	RS1/16SS103J
R 1379	RS1/16SS103J
R 1380	RS1/16SS103J

Circuit Symbol and No.	Part No.
R 1383	RS1/16SS103J
R 1391	RS1/16SS103J
R 1392	RS1/16SS103J
R 1393	RS1/16SS103J
R 1394	RS1/16SS471J
R 1395	RS1/16SS0R0J
R 1396	RS1/16SS0R0J
R 1401	RS1/16SS101J
R 1403	RAB4CQ220J
R 1404	RAB4CQ220J
R 1405	RAB4CQ220J
R 1406	RAB4CQ220J
R 1407	RS1/16SS220J
R 1408	RS1/16SS103J
R 1409	RS1/16SS820J
R 1410	RS1/16SS820J
R 1411	RAB4CQ0R0J
R 1412	RS1/16SS100J
R 1413	RS1/16SS820J
R 1414	RAB4CQ820J
R 1415	RS1/16SS103J
R 1418	RS1/16SS221J
R 1421	RS1/16SS221J
R 1423	RS1/16SS221J
R 1424	RS1/16SS221J
R 1425	RAB4CQ221J
R 1426	RAB4CQ221J
R 1501	RS1/16SS220J
R 1502	RAB4CQ220J
R 1503	RS1/16S101J
R 1504	RAB4CQ220J
R 1505	RS1/16S101J
R 1508	RAB4CQ220J
R 1512	RAB4CQ220J
R 1518	RAB4CQ220J
R 1522	RAB4CQ220J
R 1523	RS1/16S0R0J
R 1527	RAB4CQ220J
R 1533	RS1/16SS201J
R 1534	RAB4CQ220J
R 1538	RAB4CQ220J
R 1539	RS1/16SS221J
R 1542	RS1/16SS103J
R 1543	RS1/16SS680J
R 1544	RS1/16SS0R0J
R 1545	RS1/16SS0R0J
R 1549	RS1/16SS0R0J
R 1550	RS1/16SS0R0J
R 1551	RS1/16SS0R0J
R 1552	RS1/16SS471J
R 1553	RS1/16S68R0D
R 1554	RS1/16SS471J
R 1555	RS1/16SS0R0J
R 1556	RS1/16SS750J
R 1557	RS1/16SS0R0J
R 1558	RS1/16SS622J
R 1559	RAB4CQ0R0J
R 1560	RS1/16SS122J
R 1561	RS1/16SS162J
R 1562	RS1/16SS0R0J

Circuit Symbol and No.	Part No.
R 1563	RS1/16SS4R7J
R 1564	RAB4CQ0R0J
R 1565	RS1/16S101J
R 1566	RS1/16S101J
R 1567	RAB4CQ0R0J
R 1568	RS1/16S101J
R 1569	RS1/16S101J
R 1570	RS1/16S101J
R 1571	RS1/16S220J
R 1572	RAB4CQ0R0J
R 1573	RS1/16SS473J
R 1574	RAB4CQ0R0J
R 1575	RAB4CQ0R0J
R 1576	RAB4CQ0R0J
R 1577	RAB4CQ0R0J
R 1578	RS1/16SS472J
R 1579	RS1/16SS101J
R 1587	RS1/16SS101J
R 1595	RS1/16SS472J
R 1596	RS1/16SS472J
R 1597	RS1/16SS104J
R 1598	RS1/16SS270J
R 1601	RS1/16SS821J
R 1602	RS1/16SS821J
R 1603	RS1/16SS0R0J
R 1604	RS1/16SS0R0J
R 1605	RS1/16SS102J
R 1606	RS1/16SS102J
R 1607	RS1/16SS222J
R 1608	RS1/16SS222J
R 1609	RS1/16SS472J
R 1610	RS1/16SS472J
R 1611	RS1/16SS472J
R 1612	RS1/16SS472J
R 1613	RS1/16SS103J
R 1614	RS1/16SS103J
R 1615	RS1/16SS472J
R 1616	RS1/16SS472J
R 1626	RS1/16SS0R0J
R 1627	RS1/16SS0R0J
R 1628	RS1/16SS0R0J
R 1637	RS1/16SS104J
R 1638	RS1/16SS104J
R 1642	RS1/16SS221J
R 1643	RS1/16SS221J
R 1645	RS1/16SS0R0J
R 1647	RS1/16SS221J
R 1648	RS1/16SS221J
R 1649	RS1/16SS101J
R 1650	RS1/16SS101J
R 1651	RS1/16SS101J
R 1653	RS1/16SS473J
R 1656	RS1/16SS102J
R 1701	RS1/16SS473J
R 1704	RS1/16SS473J
R 1706	RS1/16SS104J
R 1707	RS1/16SS221J
R 1708	RS1/16SS221J
R 1714	RS1/16SS221J
R 1715	RS1/16SS473J

Circuit Symbol and No.	Part No.
R 1716	RS1/16SS221J
R 1717	RS1/16SS104J
R 1718	RS1/16SS104J
R 1720	RS1/16SS104J
R 1721	RS1/16SS104J
R 1722	RS1/16SS104J
R 1723	RS1/16SS104J
R 1724	RS1/16SS222J
R 1725	RS1/16SS223J
R 1726	RS1/16SS104J
R 1727	RS1/16SS104J
R 1728	RS1/16SS104J
R 1730	RS1/16SS221J
R 1731	RS1/16SS104J
R 1732	RS1/16SS0R0J
R 1733	RS1/16SS104J
R 1734	RS1/16SS221J
R 1735	RS1/16SS104J
R 1736	RS1/16SS104J
R 1737	RS1/16SS104J
R 1738	RS1/16SS104J
R 1739	RS1/16SS330J
R 1740	RS1/16SS0R0J
R 1741	RS1/16SS0R0J
R 1742	RS1/16SS473J
R 1746	RS1/16SS104J
R 1748	RS1/16SS104J
R 1749	RS1/16SS103J
R 1750	RS1/16SS473J
R 1751	RS1/16SS103J
R 1752	RS1/16SS104J
R 1753	RS1/16SS104J
R 1754	RS1/16SS104J
R 1756	RS1/16SS104J
R 1757	RS1/16SS472J
R 1758	RS1/16SS104J
R 1759	RS1/16SS104J
R 1760	RS1/16S1002D
R 1761	RS1/16SS105J
R 1762	RS1/16SS473J
R 1763	RS1/16SS104J
R 1764	RS1/16SS104J
R 1765	RS1/16SS104J
R 1767	RS1/16SS104J
R 1768	RS1/16SS473J
R 1769	RS1/16SS104J
R 1770	RS1/16SS473J
R 1771	RS1/16SS473J
R 1773	RS1/16SS103J
R 1790	RS1/16SS473J
R 1792	RS1/16SS0R0J
R 1794	RS1/16SS222J
R 1795	RS1/16SS104J
R 1796	RS1/16SS473J
R 1797	RS1/16SS104J
R 1798	RS1/16SS104J
R 1801	RS1/16SS104J
R 1802	RS1/16SS104J
R 1803	RS1/16SS104J
R 1804	RS1/16SS102J

Circuit Symbol and No.	Part No.
R 1805	RS1/16SS102J

CAPACITORS

Circuit Symbol and No.	Part No.
C 1101	CSZSC470M16
C 1102	CSZSR470M6R3
C 1103	CKSSYB104K10
C 1104	CKSSYB103K16
C 1105	CSZSR101M6R3
C 1106	CKSSYB104K10
C 1107	CKSSYB103K16
C 1108	CKSSYB104K10
C 1109	CKSRYB473K25
C 1110	CKSRYB473K25
C 1111	CKSSYB103K16
C 1112	CKSRYB105K10
C 1113	CKSRYB105K10
C 1114	CKSSYB103K16
C 1121	CKSSYB221K50
C 1122	CKSRYB393K16
C 1124	CKSSYB221K50
C 1125	CKSSYB104K10
C 1126	CKSSYB104K10
C 1127	CKSSYB104K10
C 1128	CKSRYB472K50
C 1129	CKSSYB104K10
C 1132	CKSRYB561K50
C 1133	CKSRYB561K50
C 1134	CKSRYB273K16
C 1135	CKSSYB473K10
C 1136	CKSSYB104K10
C 1137	CKSSYB104K10
C 1138	CKSSYB104K10
C 1139	CKSSYB104K10
C 1201	CKSSYB104K10
C 1204	CEV101M16
C 1205	CKSRYB104K16
C 1206	CKSRYB103K50
C 1207	CKSRYB103K50
C 1208	CCSSCH5R0C50
C 1209	CCSSCH470J50
C 1213	CKSRYB104K25
C 1214	CKSRYB104K25
C 1215	CKSSYB104K10
C 1216	CSZSC470M16
C 1217	CKSRYB104K25
C 1218	CSZSC470M16
C 1221	CKSRYB104K25
C 1301	CKSSYB104K10
C 1302	CKSSYB104K10
C 1303	CKSSYB224K6R3
C 1304	CKSSYB104K10
C 1305	CKSSYB224K6R3
C 1306	CKSSYB471K50
C 1307	CKSSYB104K10
C 1308	CKSRYB224K10
C 1309	CKSSYB104K10
C 1310	CKSSYB104K10
C 1311	CKSSYB103K16
C 1312	CKSSYB103K16

Circuit Symbol and No.	Part No.
C 1313	CKSSYB104K10
C 1314	CKSRYB224K10
C 1315	CKSRYB102K50
C 1316	CKSRYB393K16
C 1317	CKSSYB104K10
C 1318	CKSSYB103K16
C 1319	CKSSYB104K10
C 1320	CKSSYB103K16
C 1329	CKSSYB104K10
C 1330	CKSRYB183K25
C 1331	CCSSCH470J50
C 1332	CKSRYB224K10
C 1333	CKSRYB224K10
C 1334	CKSRYB102K50
C 1335	CKSSYB562K25
C 1336	CKSSYB104K10
C 1337	CKSRYB102K50
C 1338	CKSRYB102K50
C 1339	CKSRYB102K50
C 1340	CKSSYB104K10
C 1341	CCSSCH101J50
C 1342	CKSRYB391K50
C 1343	CKSRYB471K50
C 1344	CKSRYB331K50
C 1346	CKSRYB224K10
C 1347	CKSSYB104K10
C 1348	CKSSYB104K10
C 1349	CKSSYB104K10
C 1350	CKSSYB104K10
C 1351	CKSSYB104K10
C 1352	CKSSYB104K10
C 1401	CCSSCH181J25
C 1402	CKSSYB104K10
C 1403	CKSSYB104K10
C 1404	CKSSYB104K10
C 1406	CKSSYB104K10
C 1501	CKSRYB224K10
C 1502	CKSRYB224K10
C 1503	CKSRYB224K10
C 1504	CKSRYB224K10
C 1505	CKSRYB224K10
C 1507	CKSRYB224K10
C 1508	CKSRYB224K10
C 1510	CSZSC101M10
C 1513	CKSRYB224K10
C 1514	CKSRYB224K10
C 1515	CKSRYB224K10
C 1516	CKSRYB224K10
C 1517	CKSRYB224K10
C 1518	CKSRYB224K10
C 1519	CKSRYB224K10
C 1520	CKSRYB224K10
C 1521	CKSRYB224K10
C 1522	CKSRYB224K10
C 1523	CKSRYB224K10
C 1524	CKSRYB224K10
C 1525	CKSSYB104K10
C 1526	CKSRYB224K10
C 1527	CKSRYB224K10
C 1528	CKSSYB104K10

Circuit Symbol and No.	Part No.
C 1529	CKSRYB224K10
C 1530	CKSRYB224K10
C 1531	CKSSYB471K50
C 1532	CKSSYB104K10
C 1533	CKSSYB104K10
C 1534	CKSRYB224K10
C 1535	CKSSYB104K10
C 1538	CKSSYB104K10
C 1539	CKSRYB105K10
C 1540	CKSRYB105K10
C 1542	CKSSYB104K10
C 1543	CSZS4R7M16
C 1544	CKSSYB104K10
C 1547	CSZSR330M10
C 1548	CKSSYB104K10
C 1549	CKSSYB104K10
C 1550	CKSSYB104K10
C 1551	CKSSYB104K10
C 1552	CKSSYB104K10
C 1554	CKSSYB104K10
C 1555	CKSSYB104K10
C 1556	CKSSYB104K10
C 1557	CKSSYB104K10
C 1558	CKSSYB104K10
C 1559	CKSSYB104K10
C 1560	CKSSYB104K10
C 1562	CKSSYB104K10
C 1563	CKSSYB104K10
C 1564	CKSSYB104K10
C 1566	CCSSCH7R0D50
C 1567	CCSSCH7R0D50
C 1605	CKSSYB471K50
C 1606	CKSSYB471K50
C 1609	CKSRYB104K16
C 1610	CKSRYB224K10
C 1611	CSZSR100M16
C 1612	CKSQYB225K10
C 1615	CCSRCH471J50
C 1616	CCSRCH471J50
C 1617	CCSRCH471J50
C 1618	CCSRCH471J50
C 1619	CKSRYB104K16
C 1641	CKSRYB104K16
C 1650	CKSYB475K16
C 1651	CKSYB475K16
C 1676	CSZSR100M10
C 1701	CKSRYB224K10
C 1702	CKSRYB224K10
C 1703	CKSRYB224K10
C 1706	CKSRYB224K10
C 1707	CKSRYB224K10
C 1708	CKSSYB471K50
C 1710	CKSRYB224K10
C 1711	CKSSYB103K16
C 1712	CKSSYB103K16
C 1713	CKSRYB224K10
C 1716	CKSRYB224K10
C 1717	CKSSYB104K10
C 1718	CKSRYB224K10
C 1719	CKSSYB104K10

Circuit Symbol and No.	Part No.
C 1720	CKSRYB224K10
C 1721	CKSSYB104K10
C 1722	CKSRYB224K10
C 1723	CKSRYB224K10
C 1724	CKSSYB103K16
C 1727	CKSSYB224K6R3

E

Unit Number:CWX3154
Unit Name:Compound Unit(A)

Q 1299	Photo-taransistor	CPT231SCTD
S 1201	Spring Switch(12cm)	CSN1069
S 1202	Spring Switch(8cm)	CSN1069
S 1203	Spring Switch(DISC SENS)	CSN1069
S 1204	Spring Switch(DISC SENS)	CSN1070
S 1205	Spring Switch(8cm)	CSN1070
R 1298		RS1/16S0R0J
R 1299		RS1/16S0R0J

F

Unit Number:CWX3156
Unit Name:Compound Unit(B)

S 1206	Switch(CLAMP)	CSN1051

M

Unit Number:CZW3087
Unit Name:Main Unit

MISCELLANEOUS

IC 3801	IC	BA00AST
IC 3802	IC	BA6247FP
IC 3803	IC	TA78L05F
IC 3804	IC	TC7S14FU
IC 3805	Photo-interrupter	GP2L24B
Q 3801	Transistor	DTC124EU
Q 3802	Transistor	2SA1037K
Q 3803	Transistor	DTC124EU
D 3801	Diode	UDZS5R6(B)
D 3802	Diode	1SS355
L 3801	Inductor	LCTA150J2520
L 3802	Inductor	LCTA150J2520

RESISTORS

R 3801	RS1/16S103J
R 3802	RS1/16S222J
R 3803	RS1/16S471J
R 3804	RS1/16S102J
R 3805	RS1/16S102J
R 3806	RS1/16S102J
R 3807	RS1/16S102J
R 3808	RS1/16S103J
R 3809	RS1/16S222J
R 3810	RS1/16S222J
R 3811	RS1/16S102J
R 3812	RS1/16S102J

Circuit Symbol and No.	Part No.
R 3813	RS1/16S472J
R 3814	RS1/16S102J
R 3815	RS1/16S0R0J
R 3816	RS1/16S0R0J
R 3817	RS1/16S0R0J
R 3818	RS1/16S473J
R 3819	RS1/16S0R0J
R 3821	RS1/16S473J
R 3822	RS1/16S512J
R 3823	RS1/16S0R0J

CAPACITORS

C 3801	CKSQYB105K16
C 3802	CKSQYB105K16
C 3803	CKSRYB104K16
C 3804	CKSRYB104K16
C 3805	CKSRYB104K16
C 3806	CKSRYB223K50
C 3807	CKSRYB223K50
C 3808	CEVW101M16
C 3809	CEVW101M16
C 3810	CKSRYB104K16
C 3811	CEV100M16
C 3812	CKSRYB104K16
C 3813	CKSRYB102K50
C 3815	CKSQYB104K50
C 3819	CEVW101M16

N
Unit Number:CZW3088
Unit Name:SW Unit

S 3831	Switch (ANGLE)	CSN1052
S 3832	Switch (LIFT)	CSN1052

O
Unit Number:CZW3089
Unit Name:Volume Unit

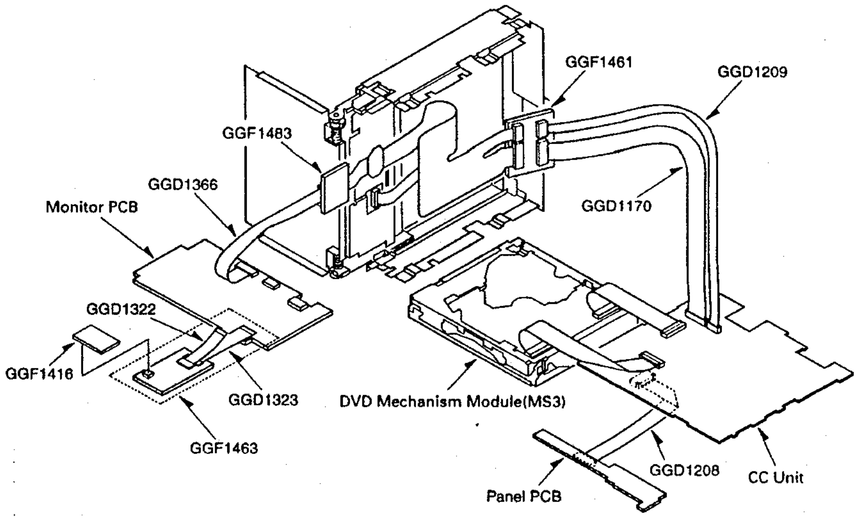
VR3841	Rotary (Angle sense)	CCW1025

Miscellaneous Parts List

	Pickup Unit(Service)(DP5)	CXX1915
M 1	Motor Unit(LOADING)	CXC4659
M 2	Motor Unit(CARRIAGE)	CXC4314
M 3	Motor(SPINDLE)	CXM1308
M 3001	Motor Unit(Position)	CXB9515
M 3002	Motor Unit(Angle)	CXB9516
M 100	Fan Motor	CXM1284
M 101	Fan Motor	CXM1289
M 102	Fan Motor	CXM1293
	LCD Panel	CWX3056
	LCD	CAW1870

6. ADJUSTMENT

6.1 JIG CONNECTION DIAGRAM



*1) After connecting the Hideaway Unit, please perform adjustment.

● JIG's List

Function	Name	Jig No.
CC Unit (CN609) <--> Main Unit (CN3801)	PCB	GGF1461
CC Unit (CN609) <--> GGF1461	40P FFC	GGD1170
CC Unit (CN609) <--> GGF1461	20P FFC	GGD1209
CC Unit (CN608) <--> Monitor PCB (CN4002)	PCB	GGF1483
CC Unit (CN2701) <--> Panel PCB (CN5901)	18P FFC	GGD1208
Monitor PCB (CN4002) <--> GGF1483	36P FFC	GGD1366
Monitor Adjustment PCB (*2)	PCB	GGF1416
JIG connector Assy (*2)	PCB and FFC	GGF1463
Monitor PCB ("FOR SERVICE" 14P terminal) <--> GGF1463 (*2)	14P FFC	GGD1323
TEST DISC (Operation check)	CD-ROM or DVD-ROM	GGV1137

*2) Since this product does not have OSD IC, OSD for adjustment is displayed by using GGF1416 and GGF1463 at the time of monitor adjustment. As you will find lands for 14 pins with 0.8mm pitch at the left top part of the monitor board, directly solder a flexible PCB of GGD1323 for adjustment. As GGD1322 is not used, be careful not to short the terminal.

6.2 DVD ADJUSTMENT

1) Precautions

This product uses 5V and 3.3V as standard voltages. The electrical potential that is the reference for signals, is not GND, but VREF (approximately 2.2V) and VHALF (approximately 1.65V).

During product adjustments, if the reference voltage is mistakenly taken as GND, and a grounding contact is made, not only would it be impossible to measure the accurate electrical potential, but also the servo motor would malfunction, resulting in the application of a strong impact on the pick up. The following precautionary measures should be strictly adhered to, in order to avoid such problems.

The reference voltage and GND should not be confused when using the minus probe of a measurement device. When an oscilloscope is being used special care should be taken to make sure that the reference voltage is not connected to the probe of ch1 (on the minus side), while the probe of ch2 (on the minus side), is connected to GND. Further, since the body frame of most measurement devices have the same electrical potential as the minus side of the probe, the body frame of the measurement device should be set to floating ground.

If the reference voltage is connected to GND by mistake, turn the regulator OFF immediately, or turn the power OFF.

- Remove the filters and wires used for measurements only after the regulator has been turned OFF.
- After the power supply is turned on, regulator ON the following adjustment and measurement are promptly done.
- Whenever the product is in the test mode, the software will not take any protective action. For this reason, special care should be taken to make sure that no mechanical or electrical shock could be applied to the product when taking measurements in the test mode.
- Whenever the EJECT key is pressed to eject the disk, no other keys, other than the EJECT key, should be pressed until the disk eject action has been completed.
- Press the EJECT key only after the disk has stopped completely.
- If the product hangs up turn the power OFF immediately.
- Laser didoes may be damaged, if the volume switch for the laser power adjustment of the pick up unit, is turned.

Attention)

- Test mode starting procedure
  Please select "MS3 check" (page 230) to start test mode.

(Additional Information)
IP-BUS slave unit (i.e. Multi-CD changer) test mode starting procedure.

- To enter the test mode

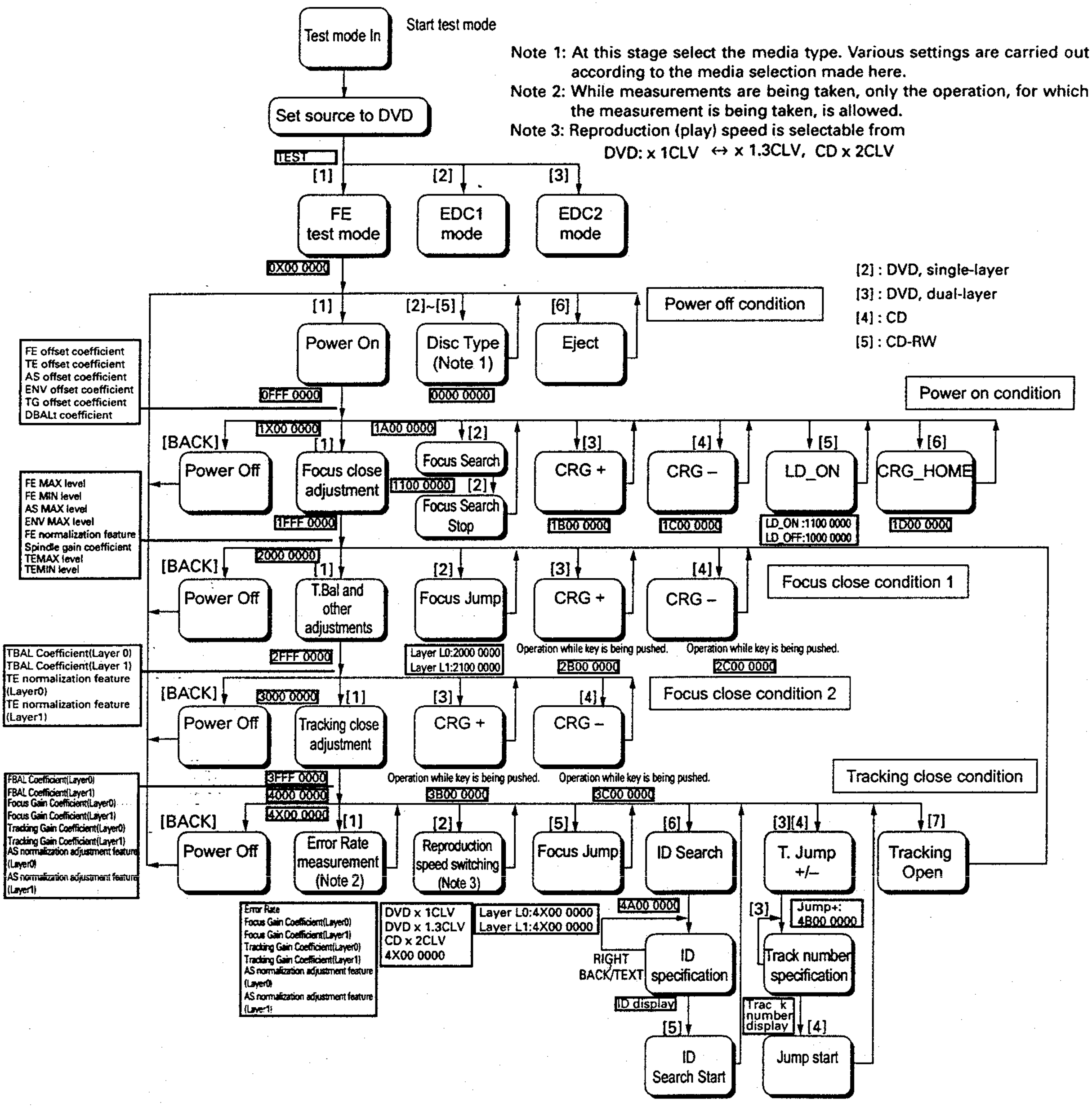
While pressing the SOURCE and ANGLE- keys at the same time, reset.

- Key Assign table

AVIC-N2/XU/UC or AVIC-X1R/XU//EW	MAIN UNIT KEY (6 keys type)
UP	UP
DOWN	DOWN
LEFT	LEFT
RIGHT	RIGHT
BAND	BAND
REAR	1
WIDE	2
ENT	3
ANGLE-	4
ANGLE+	5
EQ	6

* Refer to service manual for adjustment of the slave unit.

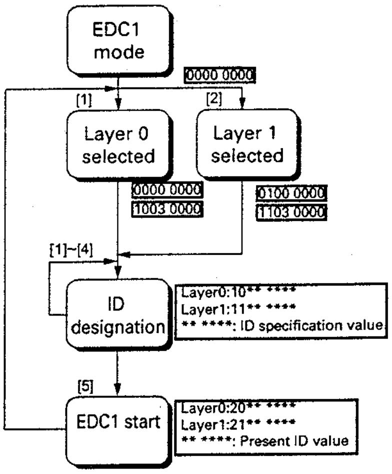
● Front-End test mode flow chart

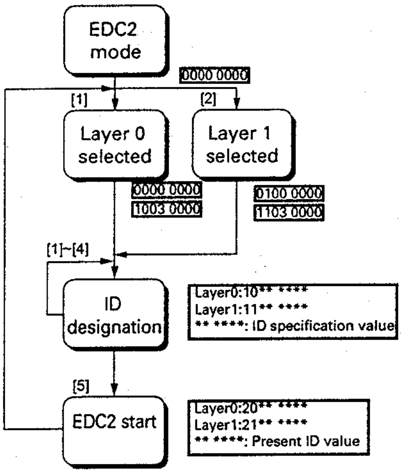


Note 1: At this stage select the media type. Various settings are carried out according to the media selection made here.
Note 2: While measurements are being taken, only the operation, for which the measurement is being taken, is allowed.
Note 3: Reproduction (play) speed is selectable from DVD: x 1CLV ↔ x 1.3CLV, CD x 2CLV

[2] : DVD, single-layer
[3] : DVD, dual-layer
[4] : CD
[5] : CD-RW

Test mode In
Start test mode
Set source to DVD
TEST
[1]
[2]
[3]
FE test mode
EDC1 mode
EDC2 mode
0X00 0000
[1]
[2]~[5]
[6]
Power off condition
Power On
Disc Type (Note 1)
Eject
0FFF 0000
0000 0000
FE offset coefficient
TE offset coefficient
AS offset coefficient
ENV offset coefficient
TG offset coefficient
DBALt coefficient
Power on condition
1X00 0000
1A00 0000
[BACK]
[1]
[2]
Power Off
Focus close adjustment
Focus Search
1100 0000
Focus Search Stop
[3]
CRG +
[4]
CRG –
[5]
LD_ON
[6]
CRG_HOME
1FFF 0000
1B00 0000
1C00 0000
LD_ON :1100 0000
LD_OFF:1000 0000
1D00 0000
FE MAX level
FE MIN level
AS MAX level
ENV MAX level
FE normalization feature
Spindle gain coefficient
TEMAX level
TEMIN level
2000 0000
T.Bal and other adjustments
Focus Jump
Focus close condition 1
Layer L0:2000 0000
Layer L1:2100 0000
Operation while key is being pushed.
2B00 0000
2C00 0000
2FFF 0000
TBAL Coefficient(Layer 0)
TBAL Coefficient(Layer 1)
TE normalization feature (Layer0)
TE normalization feature (Layer1)
3000 0000
Tracking close adjustment
Focus close condition 2
3FFF 0000
4000 0000
4X00 0000
3B00 0000
3C00 0000
Tracking close condition
FBAL Coefficient(Layer0)
FBAL Coefficient(Layer1)
Focus Gain Coefficient(Layer0)
Focus Gain Coefficient(Layer1)
Tracking Gain Coefficient(Layer0)
Tracking Gain Coefficient(Layer1)
AS normalization adjustment feature (Layer0)
AS normalization adjustment feature (Layer1)
Error Rate measurement (Note 2)
Reproduction speed switching (Note 3)
[5]
Focus Jump
[6]
ID Search
[3][4]
T. Jump +/–
[7]
Tracking Open
Error Rate
Focus Gain Coefficient(Layer0)
Focus Gain Coefficient(Layer1)
Tracking Gain Coefficient(Layer0)
Tracking Gain Coefficient(Layer1)
AS normalization adjustment feature (Layer0)
AS normalization adjustment feature (Layer1)
DVD x 1CLV
DVD x 1.3CLV
CD x 2CLV
4X00 0000
Layer L0:4X00 0000
Layer L1:4X00 0000
4A00 0000
RIGHT
BACK/TEXT
ID specification
ID display
[5]
ID Search Start
Jump+:
4B00 0000
Track number specification
Track number display
[4]
Jump start


EDC1 mode
0000 0000
[1]
[2]
Layer 0 selected
Layer 1 selected
0000 0000
1003 0000
0100 0000
1103 0000
[1]~[4]
ID designation
Layer0:10** ****
Layer1:11** ****
** ****: ID specification value
[5]
EDC1 start
Layer0:20** ****
Layer1:21** ****
** ****: Present ID value


EDC2 mode
0000 0000
[1]
[2]
Layer 0 selected
Layer 1 selected
0000 0000
1003 0000
0100 0000
1103 0000
[1]~[4]
ID designation
Layer0:10** ****
Layer1:11** ****
** ****: ID specification value
[5]
EDC2 start
Layer0:20** ****
Layer1:21** ****
** ****: Present ID value

F-close and F-search cannot be executed, unless LD-ON is set.
[If F-close isn't executed within 9 seconds after LD-ON, it switches to LD-OFF automatically.
And even if F-search is executed within 9 seconds after LD-ON, it also switches to LD-OFF.]
Please carry out F-close after carrying out power-off at once and carrying out power-on again, when carrying out F-close after performing F-search.

The track number designation is selected from the track numbers already prepared for selection.
Switching to cyclic operation is made at step REAR, and the decision is finalized (entered) in step BACK/TEXT.

For CD: Tracks 1, 4, 10, 11 and 32.

For DVD: Tracks 1, 4, 10, 11, 32, 64 and 100.

Method for designating an ID address:

- A number of digits are determined through commands RIGHT and LEFT. Numerical UP/DOWN operations are performed through commands REAR and BACK/TEXT. The decision is finalized (entered) with command ATT.

Display

Error Code List

Error status from DVD microcomputer	Contents	Display
0X50	Mecha. error	No display
0X40	No disc	No display
0X30	The temperature is abnormal	Thermal Protection in Motion
0X20	Read error	Error-02-XX
0XE2	Non-playable disc	NON-PLAYABLE DISC
0X90	Different region disc	DIFFERENT REGION DISC
0XFF	Undefined error	Error-FF

Error code of read error(Part of XX)

Error Code	Contents	Display
0X99	Data cannot read	Please confirm the disc
0X80	The address cannot be found	Please confirm the disc
0X90	Focus error	Please confirm the disc
0X91	Spindle lock NG	DVD is stopping because mechanism detected abnormality
0X92	Carriage home NG	DVD is stopping because mechanism detected abnormality
0X93	FOK error	Please confirm the disc
0X94	ID/Subcode cannot be read	Please confirm the disc
0X95	High spindle rotation	DVD is stopping because mechanism detected abnormality
0X96	Row spindle rotation	DVD is stopping because mechanism detected abnormality
0X98	TOC cannot be found	Please confirm the disc
0X9A	AV chip error	DVD is stopping because mechanism detected abnormality
0X9B	RecaveryNG(BE)	DVD is stopping because mechanism detected abnormality
0X9C	Play state error	
0X9D	Disc data error	
0X9E	Serface error (Disc distinction is improper)	

● Skew adjustment

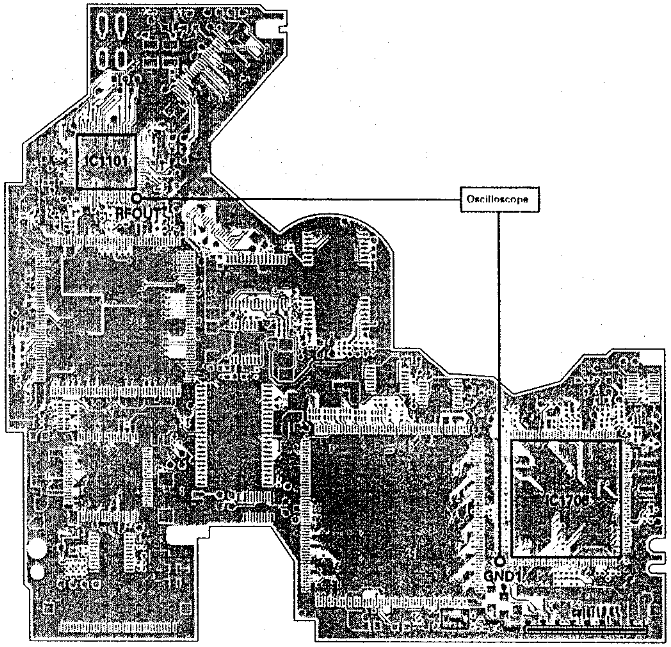
The skew adjustment is to adjust the pickup and the flatness of the disc so that the beam from the pickup continues to go to the disc vertically. In MS3 mecha, the pickup shaft on the inner track near the carriage motor is fixed, so the fixed position is regarded as the standard and the flatness is adjusted. Observing the RF waveform on the oscilloscope, repeat the adjustment on the inner track position and the outer track position, and narrow the adjusted value.

If any of the following replacements have been performed on the system, adjustments for pick up, must be conducted:

1. Pick up unit replacement
2. Spindle motor replacement
3. Carriage chassis replacement
4. Pick up unit main shaft replacement
5. Pick up unit sub-shaft replacement

Measurement device and tools : Oscilloscope
Allen key wrench
40-pin flexible extension (GGD1170)
Screw rock(GYL1001)
Disk used : GGV1018
Measurement reference : GND1
Measurement point : RFOUT

Connection diagram
DVD core unit(MS3)



Symptoms in case of poor adjustment: Error efficiency deteriorated: 10^{-3} (Optimum value: 10^{-4} or lower)
High jitter of the RF signal RF waveform deformed
Unstable operation in tracking closing and servo control

Caution: Avoid exposing your eyes to laser beams for a long time.

Preparation for adjustment: Clean both ends of the shafts.
Use brand new skew screws supplied with the service kit GXX1234.

Procedures:

1. Place the DVD mechanism module upside down.
   To avoid the disc from being robbed when it is turned upside down, first put a coin of about 1.5 mm on the table, then turn the disc upside down and set it so that the ① in the figure comes to the point immediately above the coin.
2. After replacing the pickup (by referring to the procedures of "Removing the Pickup."), roughly adjust the three skew screws through visual check so that the pickup is mounted in parallel to the CRG chassis around the inner and outer tacks.
3. Connect an oscilloscope as shown in the connecting diagram.
4. Turn on the power of the product. Load the test disc (GGV1018).
5. In the front-end test mode, set the disc type to DVD layer 1. Then, turn on the power. Move the pickup toward the inner tracks.
6. Turn on the laser diodes.
7. With the focus servo closed, complete all automatic adjustments. Close the tracking servo, and then complete all automatic adjustments.

8 Follow the next procedures, from 8-1 to 8-5, and adjust the (three) skew screws.

8-1 Move the pickup toward the inner track and turn the skew adjustment screw C so that the RF level of oscilloscope becomes the maximum.
(Tangential adjustment at the inner track position: Adjust the flatness of the disc at the inner track position with the adjustment screw C)

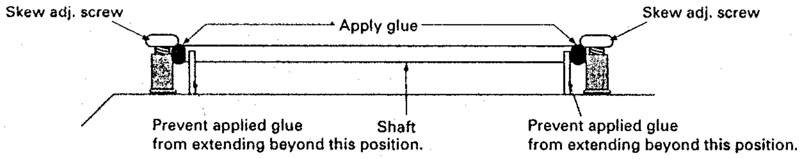
8-2 Move the pickup toward the outer track and turn the skew adjustment screw B so that the RF level becomes the maximum.
(Tangential adjustment at the outer track position: Adjust the flatness of the disc at the outer track position with the adjustment screw B)

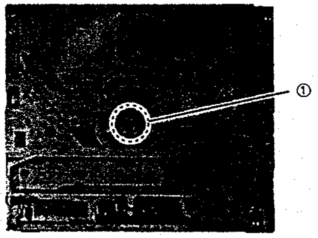
8-3 Leave the pickup at the outer track position and turn the skew adjustment screws A and B in the same direction alternately one quarter at a time (A•B•A•B •••) so that the RF level becomes the maximum.
(Radial adjustment at the outer track position: Keeping the flatness at the outer track position, adjust the flatness of the whole disk with the adjustment screws A and B)

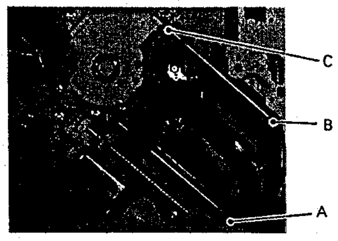
8-4 Move the pickup toward the inner track and turn the skew adjustment screw C so that the RF level becomes the maximum.
(Tangential adjustment at the inner track position: Adjust the flatness of the disc at the inner track position with the djustment screw C)

8-5 Repeat the steps from 8-2 to 8-4 three times, and adjust at the position where the RF level becomes the maximum.

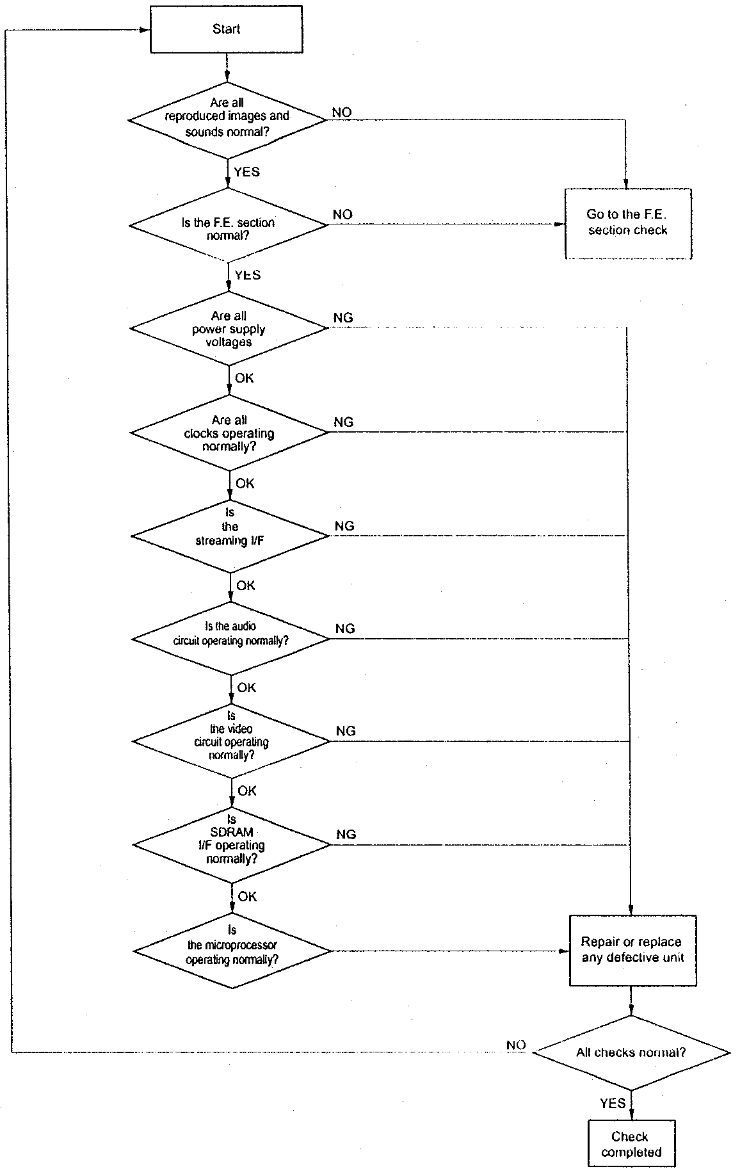
9. Turn off the power in the test mode. After confirming that the disc has stopped, eject the disc.
10. Adjust with a screw rock the shaft and skew adjustment screw to the same state as initial one.


Skew adj. screw
Apply glue
Skew adj. screw
Prevent applied glue from extending beyond this position.
Shaft
Prevent applied glue from extending beyond this position.





● Back end section check flow chart


Start
Are all reproduced images and sounds normal?
NO
YES
Is the F.E. section normal?
NO
Go to the F.E. section check
YES
Are all power supply voltages
NG
OK
Are all clocks operating normally?
NG
OK
Is the streaming I/F
NG
OK
Is the audio circuit operating normally?
NG
OK
Is the video circuit operating normally?
NG
OK
Is SDRAM I/F operating normally?
NG
OK
Is the microprocessor operating normally?
Repair or replace any defective unit
NO
All checks normal?
YES
Check completed

Check 1: Are all power supply voltages normal?

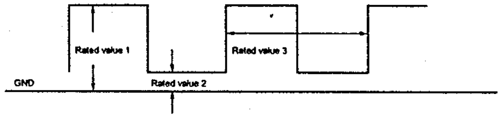
Reproduce DVD-REF-A1 Title 1.
Verify the voltage of the sensing pin.
If results are not satisfactory, check to see if there are any problems with the resin flux cored solder, parts and components.

NO.	Verification location	Rated value	Unit
1	VD8-PGND	8±0.4	V
2	VD33-GND	3.3±0.3	V
3	SRVDD33-GND	3.3±0.3	V
4	VCC5-GND	5±0.25	V
5	AVCC5-GND	5±0.3	V
6	VCC33-GND	3.3±0.15	V
7	VCC18-GND	1.8±0.15	V
8	VCC25-GND	2.5±0.2	V

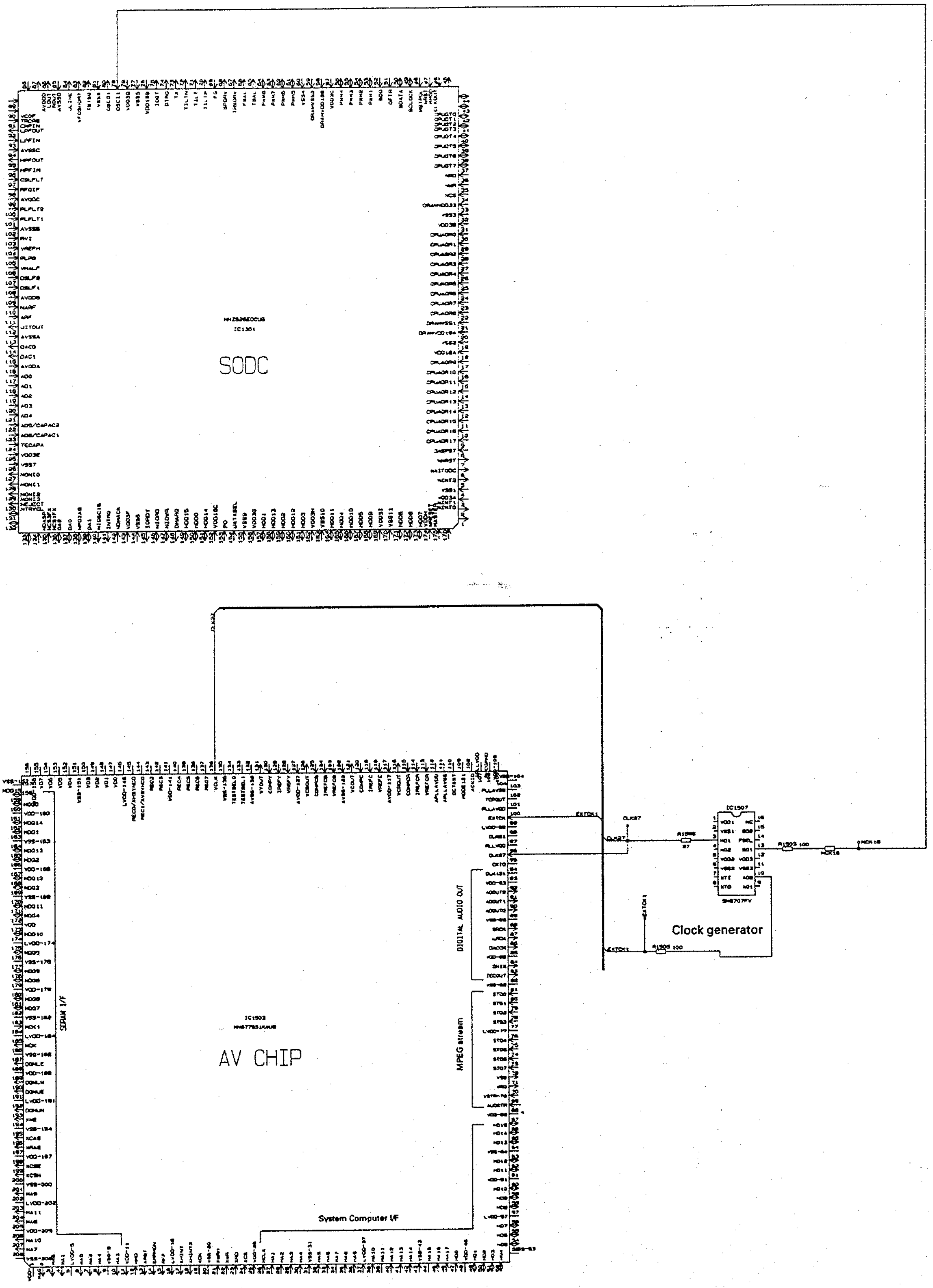
Check 2: Are all clocks operating normally?

Reproduce DVD-REF-A1 Title 1.
Checks are to be conducted with a GND reference.
If locations listed under "verification location 2", can be verified, there will be no need to perform verifications for the locations listed under "verification location 1."
If the result is not satisfactory, check to see if there are any problems with the resin flux cored solder, parts and components, in the vicinity of IC1507.

NO.	Verification location 1 (contact measurements)	Verification location 2	Media	Rated value1	Rated value 2	Rated value 3
1	CLK27	IC1503 96pin	ALL	2.65V~VCC33	GND~0.65V	27MHz±50ppm
2	EXTCK1	IC1503 100pin	DVD	2.65V~VCC33	GND~0.65V	36.8640MHz±100ppm
3	EXTCK1	IC1503 100pin	CD	2.65V~VCC33	GND~0.65V	33.8688MHz±100ppm
4	MCK16	IC1301 79pin	ALL	2.33~VCC33	GND~0.99V	16.9344MHz±100ppm
5	MCK33	IC1601 3,33pin	ALL	2.33~VCC33	GND~0.10V	33.8688MHz~40.0000MHz



Clock rated values


IC1301
SODC
IC1503
AV CHIP
SDRAM I/F
DIGITAL AUDIO OUT
MPEG stream
System Computer I/F
EXTCK1
CLK27
R1506
27
IC1507
VDD1
VSS1
XO1
XO2
VDD2
VSS2
XTI
XTO
NC
FSEL
VDD3
VSS3
A02
A01
SH8707FV
R1503 100
MCK16
R1505 100
Clock generator

Check 3: Is the streaming I/F operating normally?

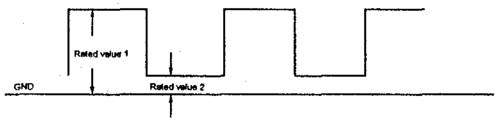
Reproduce DVD-REF-A1 Title 1.

Checks are to be conducted with a GND reference.

If the locations listed under "verification location 2" can be verified, then there is no need to conduct verifications for the locations listed under "verification location 1."

If the result is not satisfactory, check to see if there are any problems with the resin flux cored solder, parts and components, in areas where a problem occurs, for the overall sequence of"output "input"of the checked location.

NO.	Verification location 1 (contact measurements)	Verification location2	Verification Media	Rated value 1	Rated value 2	Reference waveform	Others
1	STD0	IC1503 81pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD8 at R1425
2	STD1	IC1503 80pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD9 at R1425
3	STD2	IC1503 79pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD10 at R1425
4	STD3	IC1503 78pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD11 at R1425
5	STD4	IC1503 76pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD12 at R1426
6	STD5	IC1503 75pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD13 at R1426
7	STD6	IC1503 74pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD14 at R1426
8	STD7	IC1503 73pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD15 at R1426
9	STCLK	IC1503 70pin	DVD	2V~VCC33	GND~0.8V	Waveform 2	Line name ODA2 at IC1405
10	STVALID	IC1503 69pin	DVD	2V~VCC33	GND~0.8V	Waveform 2	Line name OINTRQ at IC1405
11	MASTER	IC1301 176pin	DVD	2V~VCC33	GND~0.8V	Waveform 2	Line name STENABLE at IC1405



Streaming I/F rated value

Check 4: Is the audio circuit operating normally?

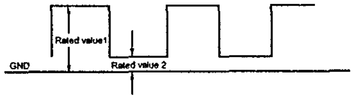
Reproduce DVD-REF-A1 Title 2 Chapter (48V/16-bit/1 kHz/0dB). Verify the circuit described in Figure 2.

Checks are to be conducted using GNDAU1 (sensing pins) as a reference.

If the locations, listed under "verification location 2", can be verified, there is no need to conduct verifications for the locations listed under "verification location 1."

If the result is not satisfactory, check to see if there are any problems with the resin flux cored solder, parts and components,in the vicinity of the main components.

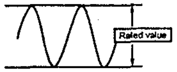
NO.	Verification location 1	Verification location 2	Rated value 1	Rated value 2	Reference waveform
1	AOUT0	IC1503 90pin	2.0V and over	0.8V and lower	Waveform 3
2	SRCK	IC1605 1pin	2.0V and over	0.8V and lower	Waveform 3
3	LRCK	IC1605 3pin	2.0V and over	0.8V and lower	Waveform 3



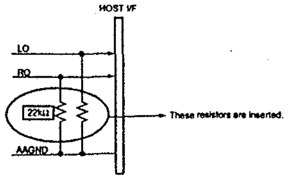
Three serial output rated values

Checks are conducted with the measurement circuit below.

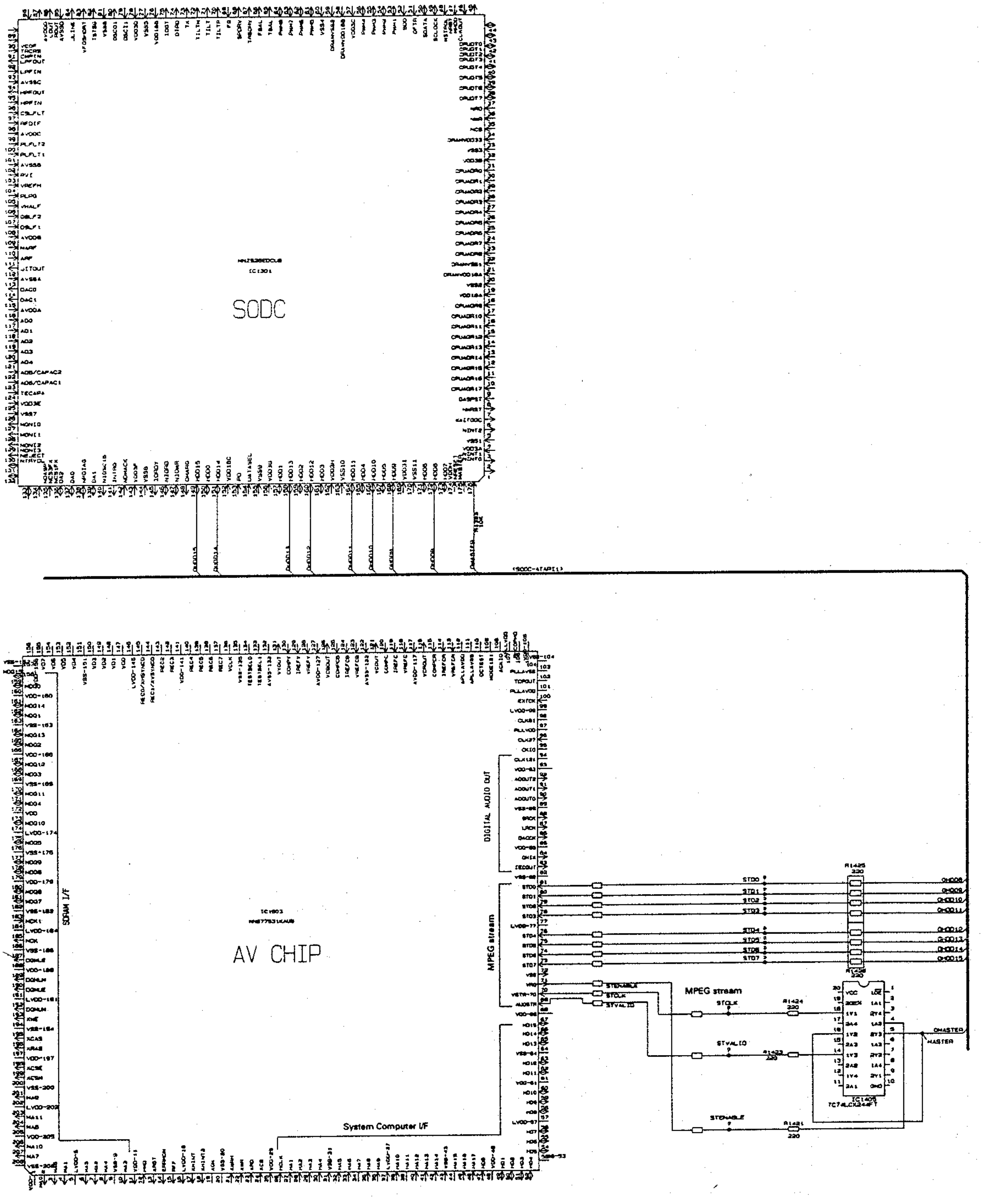
NO.	Verification location 1	Verification location 2	Rated value	Reference waveform
4	LO	CN1611 36pin	1100±150mV	Waveform 4
5	RO	CN1611 34pin	1100±150mV	Waveform 4

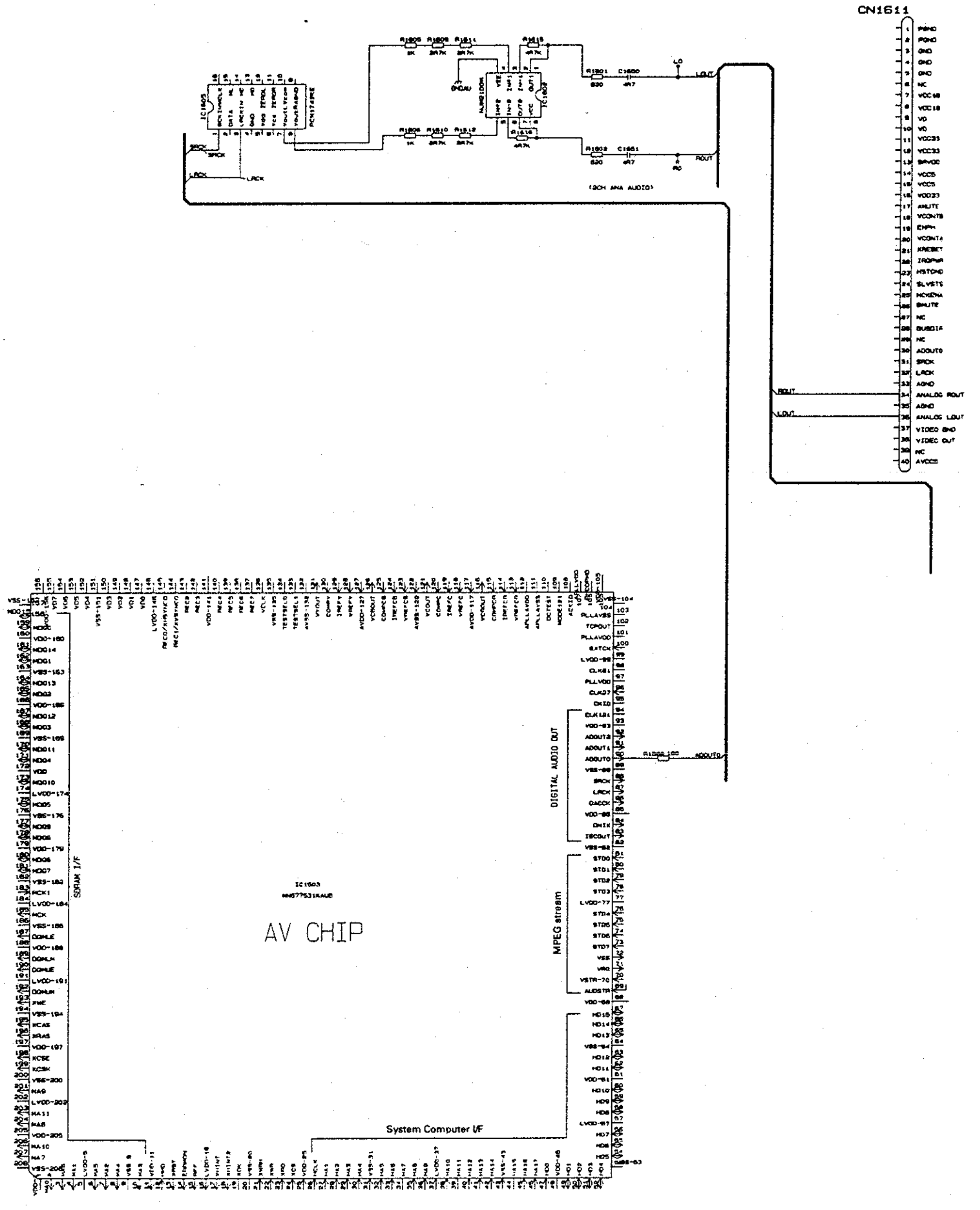


Analog audio outputs (LO and RO) rated values



LO and RO output measurement circuit


IC1301
SODC
<SODC-ATAPI(1)>
AV CHIP
SDRAM I/F
DIGITAL AUDIO OUT
MPEG stream
System Computer I/F
MPEG stream
STCLK
STVALID
STENABLE
R1424
220
R1423
220
R1421
220
R1425
IC1405
TC74LCX244FT
MASTER
DMASTER


CN1611
1 PGND
2 PGND
3 GND
4 GND
5 GND
6 NC
7 VCC18
8 VCC18
9 VD
10 VD
11 VCC33
12 VCC33
13 SRVCC
14 VCC5
15 VCC5
16 VDD33
17 AMUTE
18 VCONTB
19 EMPH
20 VCONTA
21 XRESET
22 IRQPWR
23 MSTCMD
24 SLVSTS
25 MCKENA
26 SMUTE
27 NC
28 SUBDIA
29 NC
30 ADOUT0
31 SRCK
32 LRCK
33 AGND
34 ANALOG ROUT
35 AGND
36 ANALOG LOUT
37 VIDEO GND
38 VIDEO OUT
39 NC
40 AVCC5
IC1605
PCM1742KE
R1605 1K
R1608 2R7K
R1611 2R7K
R1615 4R7K
R1606 1K
R1610 2R7K
R1612 2R7K
R1616 4R7K
GNDAU
NJM2100M
IC1607
R1601 820
C1660 4R7
R1602 820
C1661 4R7
LO
RO
LOUT
ROUT
SRCK
LRCK
(2CH ANA AUDIO)
R1600 100
ADOUT0
DIGITAL AUDIO OUT
MPEG stream
System Computer I/F
SDRAM I/F
IC1603
MN677531KAUB
AV CHIP

Check 5: Is the video circuit operated normally?

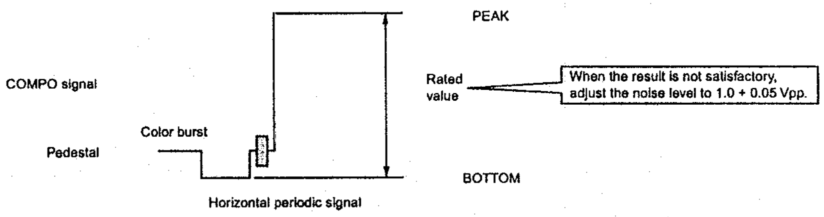
Reproduce DVD-REF-A1 Title 2 Chapters (White 100IRE).

Monitor the output with the oscilloscope, by setting the COMPO signal to a GND reference.

Set the Trigger mode to the TV trigger, and the Trigger line to line-150.

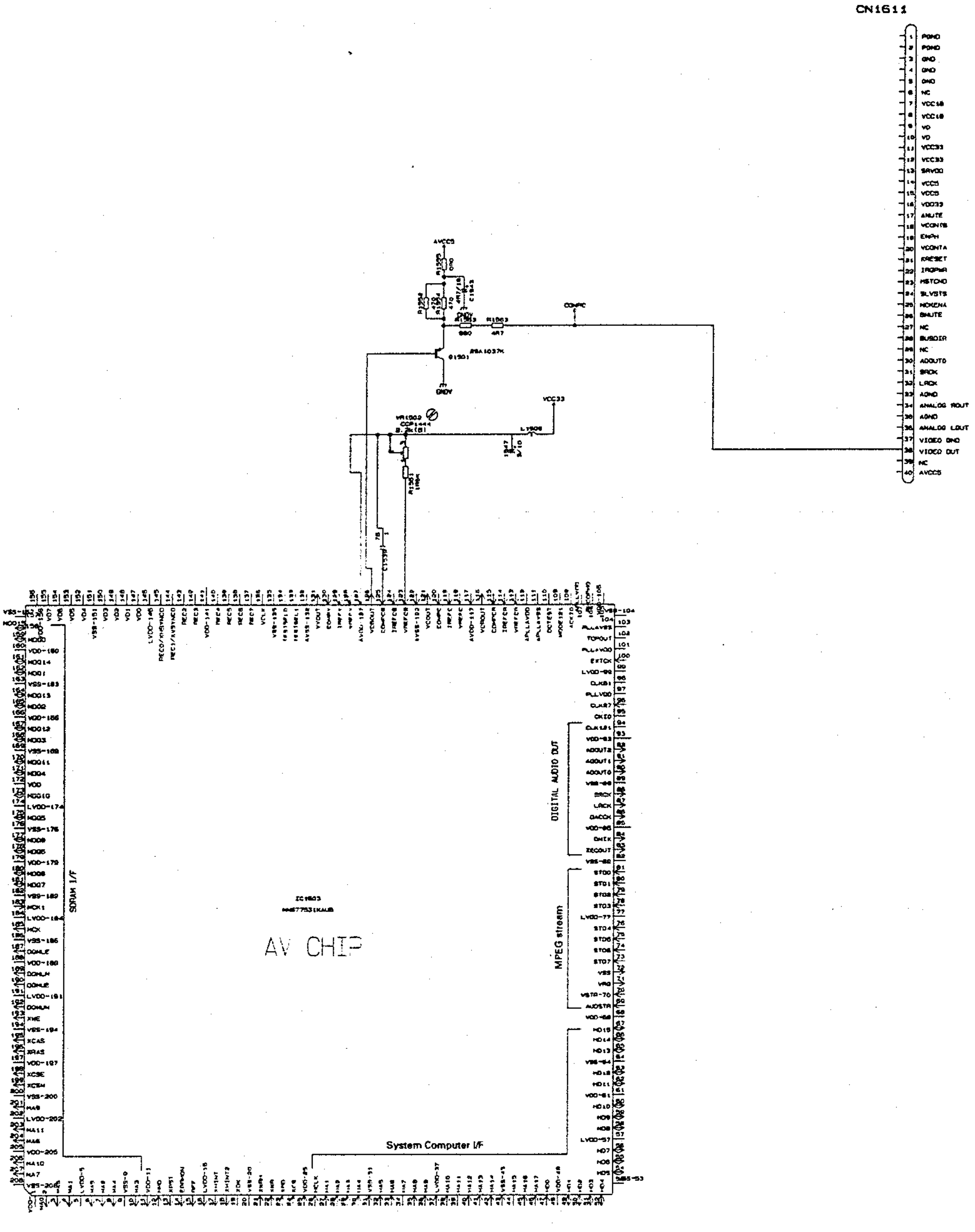
NO.	Verification location (sensing pin)	Rated value	Reference waveform
1	COMPO	1.0±0.05Vpp	Waveform 5

If the result is not satisfactory, check to see if there are any problems with resin flux cored solder, parts and components, in the vicinity of line-150 (the section marked ⑤ in the circuit diagram) and peripheral components.


PEAK
COMPO signal
Rated value
Color burst
Pedestal
BOTTOM
Horizontal periodic signal

When the result is not satisfactory, adjust the noise level to 1.0 + 0.05 Vpp.

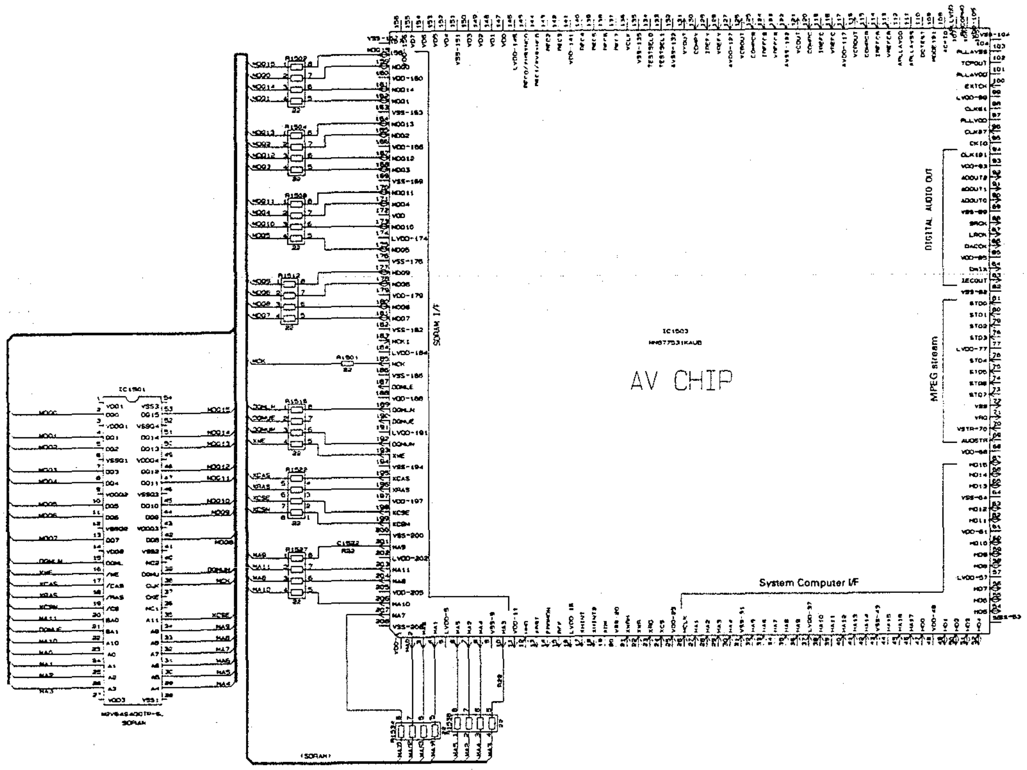
Composite signal 100% output waveform


CN1611
1 PGND
2 PGND
3 GND
4 GND
5 GND
6 NC
7 VCC18
8 VCC18
9 VD
10 VD
11 VCC33
12 VCC33
13 SRVDD
14 VCC5
15 VCC5
16 VDD33
17 AMUTE
18 VCONTB
19 EMPH
20 VCONTA
21 XRESET
22 IRQPWR
23 HSTCND
24 SLVSTS
25 HCKENA
26 SMUTE
27 NC
28 BUSDIR
29 NC
30 ADOUT0
31 BRCK
32 LRCK
33 AGND
34 ANALOG ROUT
35 AGND
36 ANALOG LOUT
37 VIDEO GND
38 VIDEO OUT
39 NC
40 AVCC5
AVCC5
R1505
0R0
R1254
R1504
470
4R7/16
C1543
GNDV
R1503
680
R1563
4R7
COMPC
Q1501
2SA1037K
GNDV
VCC33
VR1502
CCP1444
8.2k(B)
L1506
1047
R1501
1R0K
C1538
IC1603
MN677531KAUB
AV CHIP
SDRAM I/F
DIGITAL AUDIO OUT
MPEG stream
System Computer I/F

Check 6: Is SDRAM I/F operating normally?

Reproduce DVD-REF-A1 Title 1.
Check the conductivity of both the "Verification location 1" and the "Verification location2."
If the result is not satisfactory, check to see if there are any problems with the resin flux cored solder, parts and components, in areas where a problem occurs, for the overall sequence of "output "input" of the checked location.

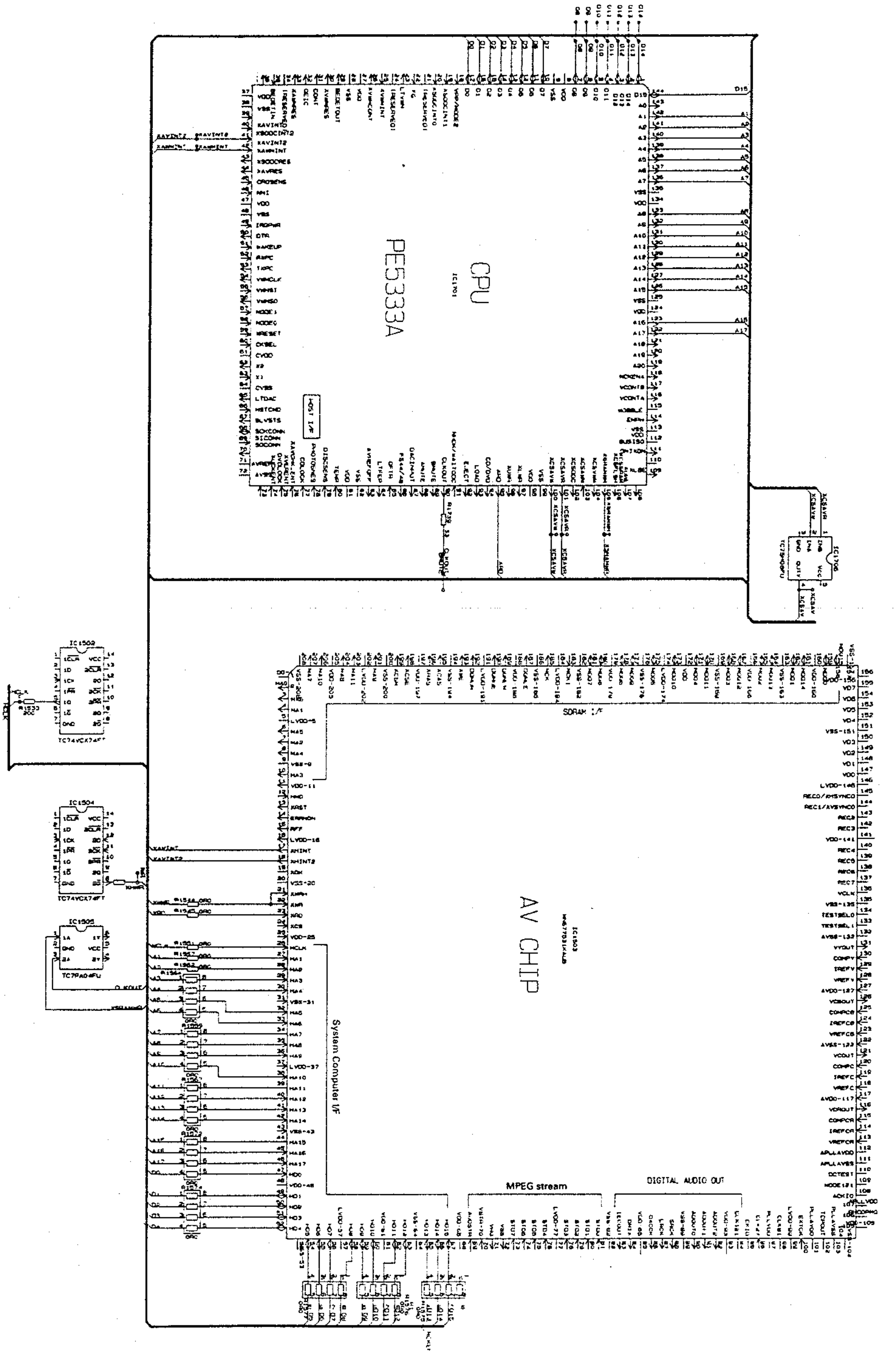
NO.	Signal name	Verification location 1	Verification location 2	Rated value
1	MA0	IC1501 23pin	IC1503 2pin	22Ω ± 5%
2	MA1	IC1501 24pin	IC1503 4pin	22Ω ± 5%
3	MA2	IC1501 25pin	IC1503 7pin	22Ω ± 5%
4	MA3	IC1501 26pin	IC1503 10pin	22Ω ± 5%
5	MA4	IC1501 29pin	IC1503 8pin	22Ω ± 5%
6	MA5	IC1501 30pin	IC1503 6pin	22Ω ± 5%
7	MA6	IC1501 31pin	IC1503 3pin	22Ω ± 5%
8	MA7	IC1501 32pin	IC1503 207pin	22Ω ± 5%
9	MA8	IC1501 33pin	IC1503 204pin	22Ω ± 5%
10	MA9	IC1501 34pin	IC1503 201pin	22Ω ± 5%
11	MA10	IC1501 22pin	IC1503 206pin	22Ω ± 5%
12	MA11	IC1501 20pin	IC1503 203pin	22Ω ± 5%
13	MDQ0	IC1501 2pin	IC1503 159pin	22Ω ± 5%
14	MDQ1	IC1501 4pin	IC1503 162pin	22Ω ± 5%
15	MDQ2	IC1501 5pin	IC1503 165pin	22Ω ± 5%
16	MDQ3	IC1501 7pin	IC1503 168pin	22Ω ± 5%
17	MDQ4	IC1501 8pin	IC1503 171pin	22Ω ± 5%
18	MDQ5	IC1501 10pin	IC1503 175pin	22Ω ± 5%
19	MDQ6	IC1501 11pin	IC1503 178pin	22Ω ± 5%
20	MDQ7	IC1501 13pin	IC1503 181pin	22Ω ± 5%
21	MDQ8	IC1501 42pin	IC1503 180pin	22Ω ± 5%
22	MDQ9	IC1501 44pin	IC1503 177pin	22Ω ± 5%
23	MDQ10	IC1501 45pin	IC1503 173pin	22Ω ± 5%
24	MDQ11	IC1501 47pin	IC1503 170pin	22Ω ± 5%
25	MDQ12	IC1501 48pin	IC1503 167pin	22Ω ± 5%
26	MDQ13	IC1501 50pin	IC1503 164pin	22Ω ± 5%
27	MDQ14	IC1501 51pin	IC1503 161pin	22Ω ± 5%
28	MDQ15	IC1501 53pin	IC1503 158pin	22Ω ± 5%
29	MCK	IC1501 38pin	IC1503 185pin	22Ω ± 5%
30	XWE	IC1501 16pin	IC1503 193pin	22Ω ± 5%
31	XCAS	IC1501 17pin	IC1503 195pin	22Ω ± 5%
32	XRAS	IC1501 18pin	IC1503 196pin	22Ω ± 5%
33	XCSM	IC1501 19pin	IC1503 199pin	22Ω ± 5%
34	XCSE	IC1501 35pin	IC1503 198pin	22Ω ± 5%
35	DQMUM	IC1501 39pin	IC1503 192pin	22Ω ± 5%
36	DQMLM	IC1501 15pin	IC1503 189pin	22Ω ± 5%
37	DQMUE	IC1501 21pin	IC1503 190pin	22Ω ± 5%


IC1503
MN677531KAUB
AV CHIP
SDRAM I/F
DIGITAL AUDIO OUT
MPEG stream
System Computer I/F
IC1501
SDRAM
(SDRAM)

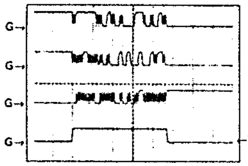
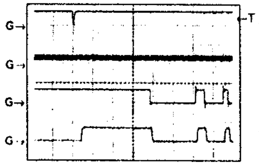
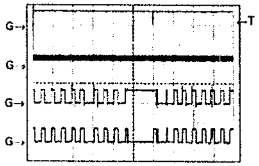
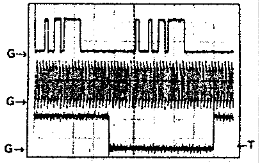
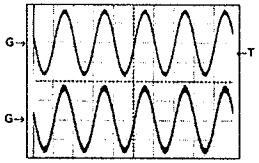
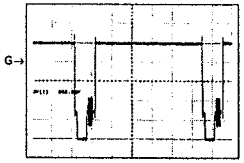
Check 7: Is the microprocessor operating normally?

Check the conductivity of both the "Verification location 1" and the "Verification location2."
If the result is not satisfactory, check to see if there are any problems with the resin flux cored solder, parts and components,in areas where a problem occurs,for the overall sequence of "output – input" of the checked location.

NO.	Signal name	Verification location 1	Verification location 2	Verification Media	Rated value	Others
1	A1	IC1701 142pin	IC1503 27pin	ALL	0Ω	
2	A2	IC1701 141pin	IC1503 28pin	ALL	0Ω	
3	A3	IC1701 140pin	IC1503 29pin	ALL	0Ω	
4	A4	IC1701 139pin	IC1503 30pin	ALL	0Ω	
5	A5	IC1701 138pin	IC1503 32pin	ALL	0Ω	
6	A6	IC1701 137pin	IC1503 33pin	ALL	0Ω	
7	A7	IC1701 136pin	IC1503 34pin	ALL	0Ω	
8	A8	IC1701 133pin	IC1503 35pin	ALL	0Ω	
9	A9	IC1701 132pin	IC1503 36pin	ALL	0Ω	
10	A10	IC1701 131pin	IC1503 38pin	ALL	0Ω	
11	A11	IC1701 130pin	IC1503 39pin	ALL	0Ω	
12	A12	IC1701 129pin	IC1503 40pin	ALL	0Ω	
13	A13	IC1701 128pin	IC1503 41pin	ALL	0Ω	
14	A14	IC1701 127pin	IC1503 42pin	ALL	0Ω	
15	A15	IC1701 126pin	IC1503 44pin	ALL	0Ω	
16	A16	IC1701 123pin	IC1503 45pin	ALL	0Ω	
17	A17	IC1701 122pin	IC1503 46pin	ALL	0Ω	
18	D0	IC1701 17pin	IC1503 47pin	ALL	0Ω	
19	D1	IC1701 16pin	IC1503 49pin	ALL	0Ω	
20	D2	IC1701 15pin	IC1503 50pin	ALL	0Ω	
21	D3	IC1701 14pin	IC1503 51pin	ALL	0Ω	
22	D4	IC1701 13pin	IC1503 52pin	ALL	0Ω	
23	D5	IC1701 12pin	IC1503 54pin	ALL	0Ω	
24	D6	IC1701 11pin	IC1503 55pin	ALL	0Ω	
25	D7	IC1701 10pin	IC1503 56pin	ALL	0Ω	
26	D8	IC1701 7pin	IC1503 58pin	ALL	0Ω	
27	D9	IC1701 6pin	IC1503 59pin	ALL	0Ω	
28	D10	IC1701 5pin	IC1503 60pin	ALL	0Ω	
29	D11	IC1701 4pin	IC1503 62pin	ALL	0Ω	
30	D12	IC1701 3pin	IC1503 63pin	ALL	0Ω	
31	D13	IC1701 2pin	IC1503 65pin	ALL	0Ω	
32	D14	IC1701 1pin	IC1503 66pin	ALL	0Ω	
33	D15	IC1701 144pin	IC1503 67pin	ALL	0Ω	
34	XCSAVR	IC1701 101pin	IC1706 1pin	ALL	0Ω	
35	XCSAVW	IC1701 100pin	IC1706 2pin	ALL	0Ω	
36	XCSAV	IC1706 4pin	IC1503 24pin	ALL	0Ω	
37	XAVINT	IC1701 42pin	IC1503 17pin	ALL	0Ω	
38	XAVINT2	IC1701 41pin	IC1503 18pin	ALL	0Ω	
39	XRD	IC1701 95pin	IC1503 23pin	ALL	0Ω	
40	CLKOUT	IC1701 90pin	IC1505 3pin	ALL	33Ω	Dividing circuitFor verification location 2, include also IC1502 pin-3
41	HCLK	IC1502 5pin	IC1503 26pin	ALL	200Ω ± 5 %	
42	XSRAMWR	IC1701 105pin	IC1505 1pin	ALL	0Ω	
43	XHWR	IC1504 8pin	IC1503 21pin	ALL	68Ω ± 5 %	


CPU
IC1501
PE5333A
HOST I/F
AV CHIP
IC1503
SDRAM I/F
System Computer I/F
MPEG stream
DIGITAL AUDIO OUT
IC1502
TC74VCX74FT
IC1504
TC74VCX74FT
IC1505
TC7PA04FU
IC1506
TC7SH08FU

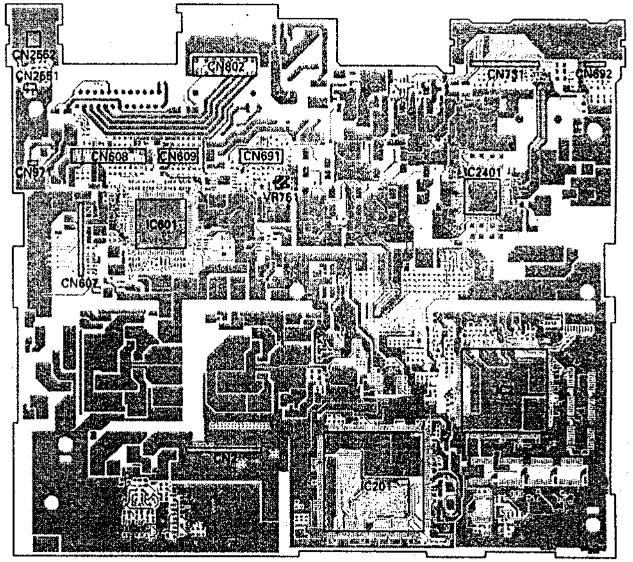
Note:1 The encircled number denote measuring pointes in the circuit diagram.
2 Reference voltage VHALF : 1.65V

⑪ CH1: STD1 ⑫ CH2: STD4 ⑬ CH3: STD7 ⑭ CH4: STENABLE 5V/div. 2μs/div.  Wave 1	⑮ CH1: AVRTM ⑯ CH2: STCLK ⑰ CH3: STVALID ⑭ CH4: STENABLE 5V/div. 2μs/div.  Wave 2(1)	⑮ CH1: AVRTM ⑯ CH2: STCLK ⑰ CH3: STVALID ⑭ CH4: STENABLE 5V/div. 50μs/div.  Wave 2(2)
⑱ CH1: AOUT0 ⑲ CH2: SRCKAV ⑳ CH3: LRCKAV 2V/div. 2μs/div.  Wave 3	㉒ CH1: LO ㉓ CH2: RO 1V/div. 500μs/div.  Wave 4	㉔ CH1: COMPO 200mV/div. 10μs/div. [White 100% output]  Wave 5

6.3 CC UNIT ADJUSTMENT

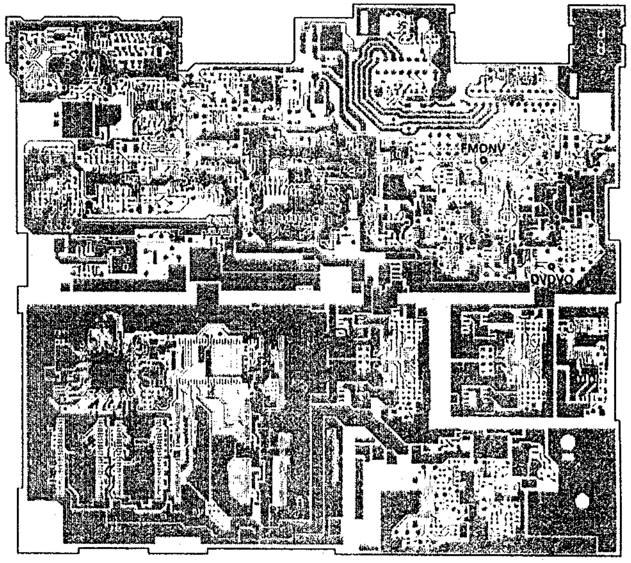
● **Adjustment point**

CC UNIT(SIDE A)

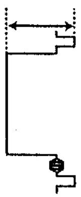


CN2562
CN2651
CN802
CN731
CN692
CN608
CN609
CN691
CN971
IC2401
VR761
IC601
CN607
IC201

CC UNIT(SIDE B)



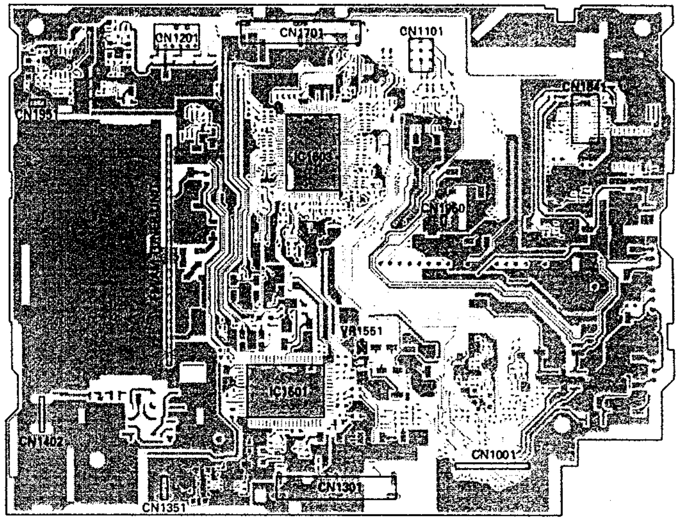
FMONV
DVDVO

Step	Adjustment item	Mode	Input (input test pin,specs, other conditions)	Output (measuring point, waveform)	Measuring instruments	Specs	Adjusting point
1	Main video level	VTR	Input test pin : DVDVO Signal : 100IRE(white 100%) Level : 1.0Vp-p(via 75Ω)	Measuring point : FMONV 	Oscilloscope	1.50 ± 0.05Vp-p Measure between the sync tip and 100IRE (top level). The 12kΩ terminal on the measuring instrument.	VR751

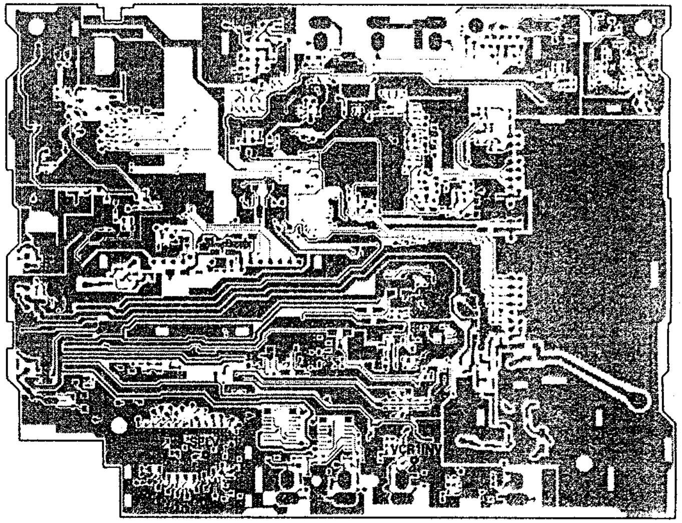
6.4 MOTHER PCB ADJUSTMENT

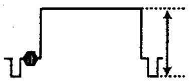
● Adjustment point

MOTHER PCB(SIDE A)


CN1201
CN1701
CN1101
CN1551
IC1603
VR1551
IC1501
CN1402
CN1001
CN1301
CN1351

MOTHER PCB(SIDE B)



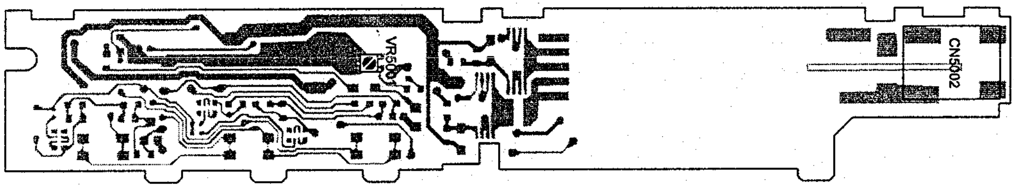
Step	Adjustment item	Mode	Input (input test pin,specs, other conditions)	Output (measuring point, waveform)	Measuring instruments	Specs	Adjusting point
1	Composite video level	VTR	Input test pin : VCR1INV Signal : 100IRE(white 100%) Level : 1.0Vp-p(via 75Ω)	Measuring point : SELV 	Oscilloscope	1.00 ± 0.05Vp-p Measure between the sync tip and 100IRE (top level). Measuring conditions: Select the 75Ω terminal on the measuring instrument.	VR1551

(1) The Video level (Vlevel) is out of spec.
When the Vlevel is more than 1.05Vp-p, the images become whitish.
When the Vlevel is less than 0.95Vp-p, the images become blackish.

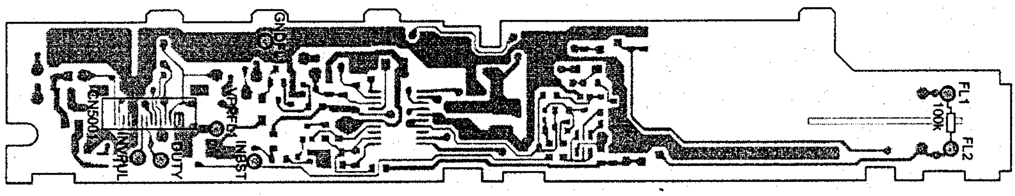
6.5 INVERTER PCB ADJUSTMENT

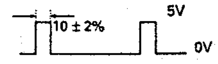
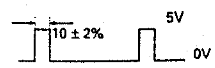
● **Adjustment point**

INVERTER PCB(SIDE A)



INVERTER PCB(SIDE B)

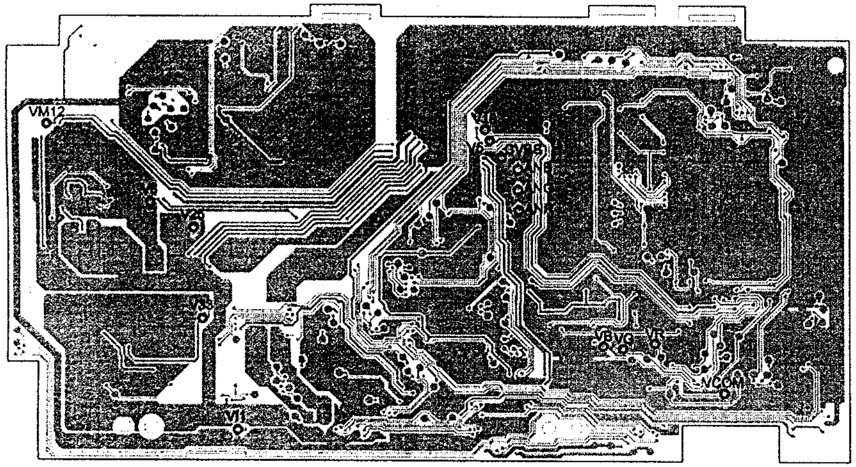


No	Adjustment item	Input signal	Measuring point	Adjusting point	Measuring method and specs.	Remarks
1	BACK LIGHT DRIVE FREQUENCY	Apply 14.4V ± 0.2V to TP VPPFL1 TP GNDFL1, TP INVPUL, TP DUTY and TP INBST : GND	TP:FL1,FL2	VR 5001	48.0 ± 0.1kHz	100k ohms is connected between TP FL1 and TP FL2. It acts as the monitor of the waveform after potential. Don't acts as the monitor of the TP FL2 directly. (there is a possibility that a measuring instrument may be destroyed, for high voltage.) Out of spec., when frequency change of following may become impossible.
2	FREQUENCY CHANGE CHECK	Apply wave of 98.0 ± 1kHz to TP INVPUL  10 ± 2% 5V 0V	TP:FL1,FL2		49.0 ± 0.5kHz	It checks that the waveform after potential is set to 49 kHz
3	FREQUENCY CHANGE CHECK	Apply wave of 104.0 ± 1kHz to TP INVPUL  10 ± 2% 5V 0V	TP:FL1,FL2		52.0 ± 0.5kHz	It checks that the waveform after potential is set to 52 kHz

6.6 MONITOR PCB ADJUSTMENT

● Adjustment point

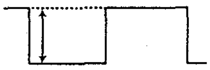
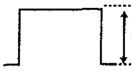
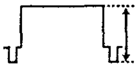
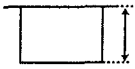
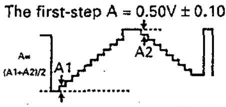
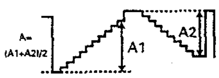
MONITOR PCB(SIDE B)



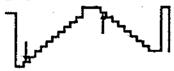
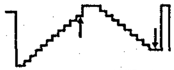
Notes:
When the power supply for TC90A64AF-P (IC4001) is OFF, be careful not to apply any voltage to its terminals except for IIC lines(SDA and SCL). The IIC lines can accept a maximum of 5V.

No	Adjustment item	Input	Measuring point	Adjusting point	Measuring method and specs.	Remarks
1	3.3V power supply verification	Apply 14.4V to TP VI1.	(TP V33)	—	V33 = 3.3V ± 0.3V	
2	2.5V power supply verification	Apply 14.4V to TP VI1.	(TP V25)	—	V25 = 2.5V ± 0.2V	
3	5V power supply verification	Apply 14.4V to TP VI1.	(TP V5)	—	V5 = 5.0V ± 0.3V	
4	8V power supply verification	Apply 14.4V to TP VI1.	(TP V8)	—	V8 = 8.0V ± 0.6V	
5	18.5V power supply verification	Apply 14.4V to TP VI1.	(TP V18)	—	V18 = 18.5V ± 0.8V	
6	-12V power supply verification	Apply 14.4V to TP VI1.	(TP VM12)	—	VM12 = -12.0V ± 0.6V	

Notes:
When the power supply for TC90A64AF-P is OFF, be careful not to apply any voltage to its terminals except for IIC lines(SDA and SCL). The IIC lines can accept a maximum of 5V.
2) In the following table, SA**h is a sub-address of TC90A64AF-P.

No	Adjustment item	Input	Measuring point	Adjusting point	Measuring method and specs.	Remarks
7	Vcom amp output Voltage waveform Verification	Any input signal	TP VCOM	–	4.50V ± 0.20V 	
8	Input waveform verification (RGB)	Apply a white 100% signal toTP AVR,ANG. ANB.	TP ANR,ANG, ANB	–	 0.70V ± 0.02V	The signal generator should be used via 75 ohms. (specs in desinging : 75.0 ± 0.2ohms)
9	Input waveform verification (composite)	Apply a white 100% signal toTP CVBS.	TP CVBS	–	 1.50V ± 0.04V	The signal generator should be used via75 ohms.
10	RGB amp output voltage waveform verification	Apply a black signal to TP ANR,ANG,ANB. (Video level:0%)	TP VG	–	 3.9V ± 0.2V	The input signal has no setup. (Apply a black signal to TP CVBS)
11	Gamma 0 Verification	Apply a 10-step signal to TP ANR,ANG,ANB.	TP VG	–	The first-step A = 0.50V ± 0.10V 	The input 10-step signal has no setup.
12	Gamma 2 verification	Apply a 10-step signal to TP ANR,ANG,ANB.	TP VG	–	The 10-step A = 3.10V ± 0.15V 	The input 10-step signal has no setup. If the measured value is out of specs, change the setting ofSA24h D11 - 8 (γ2 inflection point: GAMMA2 in the line adjustment 1 mode) (Register setting specs: 4 ± 1)

Notes:
1) When the power supply for TC90A64AF-P is OFF, be careful not to apply any voltage to its terminals except for IIC lines(SDA and SCL). The IIC lines can accept a maximum of 5V.
2) In the following table, SA**h is a sub-address of TC90A64AF-P.

No	Adjustment item	Input	Measuring point	Adjusting point	Measuring method and specs.	Remarks
13	B SUB BRIGHT	Apply a 10-step signal to TP ANR,ANG, ANB.	TP VG and VB	Register setting of SA39h D11 - 8	Adjust the first step levels of the G waveform and the B waveform. 	Register setting specs : 8 ± 2 (specs in designing: 8 ± 1) In the Line adjustment 2 mode, SUB BRI B can be used as the adjusting point.
14	B SUB CONTRAST	Apply a 10-step signal to TP ANR,ANG, ANB.	TP VG and VB	Register setting of SA26h D7 - 1	Adjust the 10th step levels of the G waveform and the B waveform. 	Register setting specs: 64 ± 3 (specs in designing: 64 ± 2) In the Line adjustment 2 mode, SUB CON B can be used as the adjusting point.
15	R SUB BRIGHT	Apply a 10-step signal to TP ANR,ANG, ANB.	TP VG and VR	Register setting of SA39h D15 - 12	Adjust the first step levels of the G wave form and the R waveform.(Measuring point is the same as that of No,13.)	Register setting specs: 8 ± 2 (specs in designing: 8 ± 1) In the Line adjustment 2 mode, SUB BRI R can be used as the adjusting point.
16	R SUB CONTRAST	Apply a 10-step signal to TP ANR,ANG, ANB.	TP VG and VR	Register setting of SA26h D15 - 9	Adjust the 10th step levels of the G waveform and the R waveform.(Measuring point is the same as that of No,14.)	Register setting specs: 64 ± 3 (specs in designing: 64 ± 2) In the Line adjustment 2 mode, SUB CON R can be used as the adjusting point.
17	Horizon dot position	Any input signal	–	Register setting of SA2Ah D3 - 0	5(0101)	After being written in,the setting value of EEP-ROM is checked. 2 mode,DOT CLK can be used as the adjusting point.
18	Aging	Any input signal	–	–	Keep the unit in the operation mode for 30 minutes or longer.	Block light lighting. An animation is displayed.
19	Flicker	Input a signal for alternate white and black lines to TP ANR, TP ANG and TP ANB.	Screen	Register setting of SA22h D15 - 8	Adjust so that the flickers become minimum in all	If it input a signal for alternate white into TP CVBS, it is possible. (However, adjustment by RGB has priority.) The luminance level of the input signal: 50%. In the flicker adjustment mode, COM DC can be used as the adjusting point.

Flicker adjustment has been deviated The images flicker.

●EEPROM setting mode

*) Since this product does not have OSD IC, OSD for adjustment is displayed by using GGF1416 and GGF1463 at the time of monitor adjustment. As you will find lands for 14 pins with 0.8mm pitch at the left top part of the monitor board, directly solder a flexible PCB of GGD1323 for adjustment. As GGD1322 is not used, be careful not to short the terminal.

[Operations]
To enter the setting mode, while keeping the EPRTEST terminal at "Low",
turn reset the monitor micro computer. While pressing the [REAR] and [EQ] Kyes at the same time,reset.
Flicker adjustment mode
Line adjustment 1 mode
Line adjustment 2 mode
Dimmer parameter setting mode

[↑ ↓] button: Used to select a desired adjustment item in each mode
[←→] button: Used to adjust the selected item

Notes:
1) The setting values are written in the EEPROM and then the read-out data is displayed on the screen.
WRITE and READ operations are processed by the block data of 16 bits.
The total bits for the settings depend on adjusting items.
2) For CS (Check Sum) items, when the settings are changed, the CS value is written in 8 bits by applying the exclusive OR (XOR). The CS value is first written in the EEPROM and then the read-out data is displayed.
If the written data is different from the read-out data, the letter color for the read-out data is changed.

● Memory items and addresses on the EEPROM(S-93C46BR0I-J8T1)

<table>
<tr><td></td><td>EEPROM address</td><td>Bit15</td><td>Bit14</td><td>Bit13</td><td>Bit12</td><td>Bit11</td><td>Bit10</td><td>Bit9</td><td>Bit8</td><td>Bit7</td><td>Bit6</td><td>Bit5</td><td>Bit4</td><td>Bit3</td><td>Bit2</td><td>Bit1</td><td>Bit0</td></tr>
<tr><td rowspan="21"></td><td>00H</td><td colspan="8">Dimmer external light threshold (high)</td><td colspan="8">Dimmer external light threshold (low)</td></tr>
<tr><td>01H</td><td colspan="8">Backlight output (upper limit)</td><td colspan="8">Backlight output (lower limit)</td></tr>
<tr><td>02H</td><td colspan="8">Common reverse output center (COM DC)
PIP SA:22h[B15-8]</td><td colspan="6">Common reserve output amplitude (COM AMP)
PIP SA:22h[B7-2]</td><td colspan="2">Don't care</td></tr>
<tr><td>03H</td><td colspan="2">Don't care</td><td colspan="6">Output clamp DC (RGB BIAS)
PIP SA:23h[B13-8]</td><td colspan="4">Don't care</td><td colspan="4">γ0 inflection point (GAMMA 0)
PIP SA:23h[B3-0]</td></tr>
<tr><td>04H</td><td colspan="4">γ3 Inflection point (GAMMA 3)
PIP SA:24h[B15-12]</td><td colspan="4">γ2 inflection point (GAMMA 2)
PIP SA:24h[B11-8]</td><td colspan="5">γ1 inflection point (GAMMA 1)
PIP SA:24h[B7-3]</td><td colspan="3">Don't care</td></tr>
<tr><td>05H</td><td colspan="7">Output sub contrast R (SUB CON R)
PIP SA:26h[B15-9]</td><td>Don't care</td><td colspan="7">Output sub contrast B (SUB CON B)
PIP SA:26h[B7-1]</td><td>Don't care</td></tr>
<tr><td>06H</td><td colspan="4">Sub brightness R after γ circuit (SUB BRI R)
PIP SA:39h[B15-12]</td><td colspan="4">Sub brightness B after g circuit (SUB BRI B)
PIP SA:39h[B11-8]</td><td colspan="8">Don't care</td></tr>
<tr><td>07H</td><td colspan="8">Don't care</td><td colspan="4">Don't care</td><td colspan="4">Clock phase adjustment (DOT CLK)
PIP SA:2Ah[B3-0]</td></tr>
<tr><td>08H</td><td colspan="8">Don't care</td><td colspan="5">Don't care</td><td colspan="2">Sharpness (SHARPNESS)
PIP SA:05h[B2-1]</td><td>Don't care</td></tr>
<tr><td>09H-1BH</td><td colspan="16">Don't care</td></tr>
<tr><td>1CH</td><td colspan="16">Check sum address (00h-1bh)</td></tr>
<tr><td>1DH</td><td colspan="8">Don't care</td><td colspan="8">Common reverse output center(Reference)</td></tr>
<tr><td>1EH</td><td colspan="12">Don't care</td><td colspan="4">Clock phase adjustment initial value</td></tr>
<tr><td>1FH</td><td colspan="16">Don't care</td></tr>
<tr><td>20H</td><td colspan="8">External light of dimmer adjustment(H)</td><td colspan="8">Back light of dimmer adjustment(H)</td></tr>
<tr><td>21H</td><td colspan="8">External light of dimmer adjustment(M)</td><td colspan="8">Back light of dimmer adjustment(M)</td></tr>
<tr><td>22H</td><td colspan="8">External light of dimmer adjustment(L)</td><td colspan="8">Back light of dimmer adjustment(L)</td></tr>
<tr><td>23H-3FH</td><td colspan="16">Don't care</td></tr>
</table>

EEPROM initial value

Item	Meaning	initial value(hex)	initial value(DEC)
COM_DC	Common reverse output center	8C	140
COM_AMP	Common reverse output amplitude	1E	30
RGB_BIAS	Out clamp DC	00	00
GAMMA0	γ0	02	02
GAMMA3	γ3	04	04
GAMMA2	γ2	04	04
GAMMA1	γ1	13	19
SUB_CON_R	Output sub contrast R	40	64
SUB_CON_B	Output sub contrast B	40	64
SUB_BRI_R	Sub brightness R after γ circuit	08	08
SUB_BRI_B	Sub brightness B after γ circuit	08	08
DOT_CLK	Clock phase adjustment	05	05
SHARPNESS	Sharpness	03	03
BL_MAX	Back light output (Max.)	C4	196
BL_MIN	Back light output (Min.)	5B	91
REF_HIGH	Dimmer (H)	C0	192
REF_LOW	Dimmer (L)	60	96
LUM_HIGH	External light (H)	E2	226
LUM_MID	External light (M)	87	135
LUM_LOW	External light (L)	52	82
BL_HIGH	Back light (H)	C4	196
BL_MID	Back light (M)	C4	196
BL_LOW	Back light (L)	68	104

[Displays in each mode]

In the following figures, the letters and numbers surrounded by a large square are for OSD examples.
On the screen, the adjustment names and the settings (or written data) are listed.
The settings (or written data) will change when some adjustments are made in each mode.

* The following examples show the maximum values.

(1) Flicker adjustment mode

Adjustment item	Adjustment range	Adjustable name	Settings or written data (DEC)		
Common reverse output center	[0 - 255]	COM DC	255		

(2) Line adjustment 1 mode

Adjustment item	Adjustment range	Adjustable name	Settings or written data (DEC)		
Bright (SA22: B7-2)	[0 - 63]	BRIGHT	63		LINE1
Contrast (SA25: B7-1)	[0 - 127]	CONTRAST	127		
Common reverse output center	[0-255]	COM DC	255		
Common reverse output amplitude	[0-63]	COM AMP	63		
Output clamp DC	[0-63]	RGB BIAS	63		
γ0 inflection point	[0-15]	GAMMA0	15		
γ3 inflection point	[0-15]	GAMMA3	15		
γ2 inflection point	[0-15]	GAMMA2	15		
γ1 inflection point	[0-31]	GAMMA1	31		
				CS	FF

Notes:

1) CONTRAST data

The CONTRAST data is adjustable, and used as reference data for other adjustment items, which is not memorized in the EEPROM.

2) BRIGHT and COM AMP data

The BRIGHT and COM AMP adjustments are made by using the same 2-screen IC register(SA22h B7-2: common reverse output amplitude).

Therefore, adjusting one of the data will change the other one.

(3) Line adjustment 2 mode

Adjustment item	Adjustment range	Adjustable name	Settings or written data (DEC)		
Bright (SA22: B7-2)	[0 - 63]	BRIGHT	63		LINE2
Contrast (SA25: B7-1)	[0 - 127]	CONTRAST	127		
Output sub contrast R	[0 - 127]	SUB CON R	127		
Output sub contrast B	[0 - 127]	SUB CON B	127		
Sub brightness R after γ circuit	[0 - 15]	SUB BRI R	15		
Sub brightness B after γ circuit	[0 - 15]	SUB BRI B	15		
Clock phase adjustment	[0 - 15]	DOT CLK	15		
Sharpness	[0 - 3]	SHARPNESS	3		
				CS	FF

Notes:

1) CONTRAST data

The CONTRAST data is adjustable, and used as reference data for other adjustment items, which is not memorized in the EEPROM.

2) SUB BRI R and SUB BRI B data

The displayed value or EEPROM written data is different from the setting value for the 2-screen IC register (IC4001 : TC90A64AF-P).

(Before displayed on the screen, the setting value is converted via some software.)

Displayed value (adjusting value) (DEC)	E2PROM written value. (DEC)	2-screen IC register setting (BIN)	
15	15	0111	(MAX)
14	14	0110	
· ·	· ·	· ·	
9	9	0001	
8	8	0000	(TIP)
7	7	1111	
· ·	· ·	· ·	
1	1	1001	
0	0	1000	(MIN)

(4) Dimmer parameter setting mode

Adjustment item	Adjustment range	Adjustable name	Settings or written data (DEC)		
Backlight output (MAX)	[0 - 255]	BL MAX	FF		DIMMER
Backlight output(MIN)	[0 - 255]	BL MIN	FF		
Dimmer threshold (high)	[0 - 255]	REF H	FF		
Dimmer threshold (low)	[0 - 255]	REF L	FF		
External light point (high)	[0 - 255]	LUM H	FF		
External light point (middle)	[0 - 255]	LUM M	FF		
External light point (low)	[0 - 255]	LUM L	FF		
Backlight point (high)	[0 - 255]	BL H	FF		
Backlight point (middle)	[0 - 255]	BL M	FF		
Backlight point (low)	[0 - 255]	BL L	FF	CS	FF

Note:

The dimmer point data is memorized in the EEPROM, but not treated as a CS item.
It's because the settings are adjustable by the user.

● Dot Clock Adjustment Mode

[Operations]

- [Dot Clock adjustment mode] starting procedure
  Reset start while pressing the [ENT] and [ANGLE+] Keys together.
- [Dot Clock adjustment mode] cancellation Monitor's microcomputer OFF.
- The operation after this should use Navigation's remote controller.
- [↑↓] button : Used to select a desired adjustment item in each mode.
- [←→] button : Used to adjust the selected item.

[EEPROM : S-93C46BR0I-J8T1]

The setting values are written in the EEPROM and then the read-out data is displayed on the screen.
WRITE and READ operations are processed by the block data of 16 bits.

[Display]

In the following figures,a large square are for OSD examples.

Dot Clock adjustment mode

Adjustment item	Adjustment range	Adjustable name	Settings or written data (DEC)		
Clock phase adjustment	[0 - 15]	DOT CLK	15		
Clock phase adjustment (initial)	[0 - 15]	[FACTORY	8	]	
Common reverse output center	[0-255]	COM DC	255		
Common reverse output center adjustment (initial)	[0-255]	[FACTORY	140	]	

* CS(Check Sum)display is not performed.

● To operate the Monitor Assy only

Setting of the TP1(EPRTEST), TP2(TESTAGE) and TP3(TOUCHTS) in single operation mode is as follows.

TP2	TP3	TP1	Contents
L	H	H	For aging (See p.221.)
L	-	L	EEPROM setting mode (See p.222.)
L	L	H	Touch panel test mode (See p.231.)

H : Not connect
L : Connect to the ground

Contents of single operation mode

[For aging]

MVIPW : ON
MFLPW : ON
DIMMER : 5V (FFH)
BRIGHT : ±0
CONTRAST : ±0
WIDE MODE : Full size

[EEPROM setting mode]

MVIPW : ON
MFLPW : ON
DIMMER : The calculated value from coordinates of EEPROM data
BRIGHT : ±0
CONTRAST : ±0
WIDE MODE : Full size

[Touch panel test mode]

MVIPW : ON
MFLPW : ON
DIMMER : The calculated value from coordinates of EEPROM data
BRIGHT : ±0
CONTRAST : ±0
WIDE MODE : Full size

6.7 TEST MODE

● NAVIGATION TEST MODE

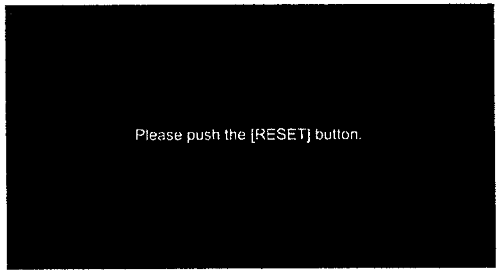
1. How to start the test mode

1. When +Battery and ACC are ON, push RESET and EJECT buttons simultaneously.
2. Release RESET button only.
3. When "password entry screen" is displayed, release EJECT button.
4. Enter the password.
5. When the password has been entered, press [ENTER] key.
6. If the correct password has been entered, the test mode menu will be displayed.

* The password entry screen, as the one used in the previous model, is no longer displayed.

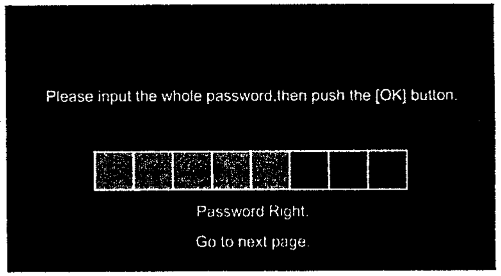
<< Password for the service >>
The password is [↑(up)] → [↑(up)] → [↓(down)] → [↓(down)] → [ENTER].
If 8 digits or more are entered and [ENTER] key is pressed, it will be treated as a password error.

- Password entry screen



Please push the [RESET] button.

- Password OK : After 2 seconds or so, the screen will automatically move on to the menu screen.



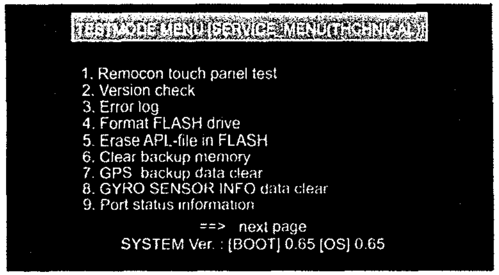
Please input the whole password,then push the [OK] button.

Password Right.

Go to next page.

- Password NG : Nothing will be displayed, and reboot action will be taken.

2. Test mode menu

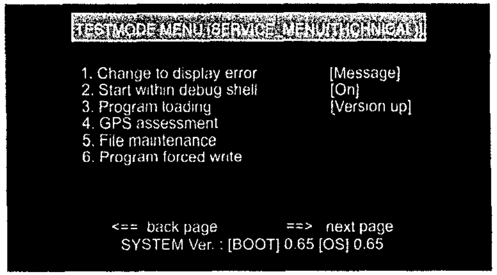


TESTMODE MENU (SERVICE MENU(TECHNICAL))

1. Remocon touch panel test
2. Version check
3. Error log
4. Format FLASH drive
5. Erase APL-file in FLASH
6. Clear backup memory
7. GPS backup data clear
8. GYRO SENSOR INFO data clear
9. Port status information

==> next page
SYSTEM Ver. : [BOOT] 0.65 [OS] 0.65

No.	Inspection item	Outline of inspection	Content if inspection
1	Remocon touch panel test	Remote controller touch panel inspection	Calibration setting and remote controller inspection are performed.
2	Version check	Version information check	Display of various version information. (system software, GPS, system microprocessor, microprocessor for mechanism control, microprocessor for timer). The screen will return to "menu" by BACK key.
3	ERROR log	Error history entry	History of system software errors stored in SRAM is displayed. Maximum 8 events from the error last occurred can be displayed. The screen will return to "menu" by BACK key.
4	Format FLASH drive	FLASH format	FLASH domain used by the system soft is initialized. When the job is done, the screen will return to "menu".
5	Erase APL-file in FLASH	Application file inside FLASH is clear	Application file inside FLASH is clear. *(Except voice data and SRAM backup variable) When the job is done, the screen will return to "menu".
6	Clear backup memory	Back up variables initialization	SRAM domain used by the system software is initialized. When the job is done, reboot action will be taken.
7	GPS backup data clear	GPS back up data clear	SRAM domain used by GPS is initialized. When the job is done, the screen will return to "menu".
8	GYRO SENSOR INFO data clear	Learned data inside gyro sensor is clear	Learned data inside gyro sensor is cleared. When the job is done, the screen will return to "menu".
9	Port status information	Port status display	Port status is displayed. (reverse, parking, pulse, SDRAM capacity.)

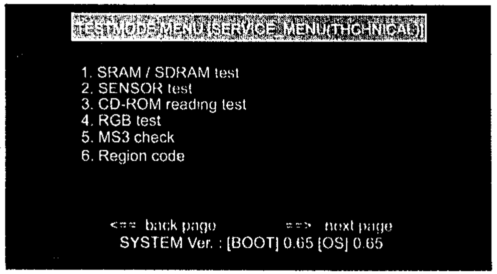


TESTMODE MENU (SERVICE MENU(TECHNICAL))

1. Change to display error [Message]
2. Start within debug shell [On]
3. Program loading [Version up]
4. GPS assessment
5. File maintenance
6. Program forced write

<== back page ==> next page
SYSTEM Ver. : [BOOT] 0.65 [OS] 0.65

No.	Inspection item	Outline of inspection	Content if inspection		
1	Change to display error	Switching of error information display	Display setting for error cases. (for debugging) Message/Information (error information) selectable.		
2	Start within debug shell	Switching of debug shell start	Setting for debug shell start. (for debugging) Off (no initial start)/On (initial start) selectable.		
3	Program loading	Switching of program loading	Recognition method for boot up program write is changed.		
			Disc version (default)	System program	Write when the version No. in the disc is higher.
				System data	Write when the version No. in the disc is higher.
				GPS program	Write when the version No. in the disc is higher.
				Application program	Write when the version information is different from the one in disc.
			Version upgrade (for debug)	System program	Write when the version No. in disc or card is higher.
				System data	Write when the version No. in disc or card is higher.
				GPS program	Write when the version No. in disc or card is higher.
				Application program	Write when the version No. in disc or card is higher.
4	GPS assessment	GPS assessment system start	GPS assessment system can be used. The system will return to "menu" by BACK key.		
5	File maintenance	File maintenance function	File maintenance operations are made. Formatting of SRAM drive and PC card (ATA Flash Card) are made. SRAM data is retrieved and copied to PC card. Data retrieved from SRAM is copied to SRAM from PC card.		
6	Program forced write	Program forced write	Rewriting of SYS (system), GPS (GPS) and APL (application) software are done by force. (Joystick is used) The system will return to "menu" by BACK key.		



```
TESTMODE MENU [SERVICE MENU(THCHNICAL)]

1. SRAM / SDRAM test
2. SENSOR test
3. CD-ROM reading test
4. RGB test
5. MS3 check
6. Region code


<== back page          ==> next page
SYSTEM Ver. : [BOOT] 0.65 [OS] 0.65
```

No.	Inspection item	Outline of inspection	Content if inspection
1	SRAM/SDRAM test	Memory inspection	SRAM : Device inspection and bus inspection are performed against all SRAM domains. Data will be protected. (applicable to both 32M and 64M) SDRAM : Device inspection and bus inspection are performed against all SDRAM domains. Data will be protected for both BIOS domain and USER domain. The function for SDRAM all domain inspection will activate by the built-in instruction RAM.
2	SENSOR test	Sensor inspection	G sensor, gyro, power supply voltage and installation condition are displayed. The system will return to "menu" by BACK key.
3	CD-ROM reading test	CD-ROM read test	Inspection for reading by CD-ROM drive is performed.
4	RGB test	Image RGB inspection	RGB inspection (Upper half, 8 colors. Black/blue/red/pink/green/light blue/yellow/white display. Lower half, 3 colors. Red/green/blue.) →red (FULL)→green (FULL)→blue (FULL)→ Switching can be made by [←] and [→] keys. The system will return to "menu" by BACK key.
5	MS3 check	MS3 check [V+R]	MS3 mechanism test mode inspection.
6	Region code	Region code display	Region code display.

3. How to select test mode menu

Select a desired menu by [↑] and [↓] keys, and execute by pressing [ENTER] key.
Pages can be changed by [←] and [→] keys.

4. Version information

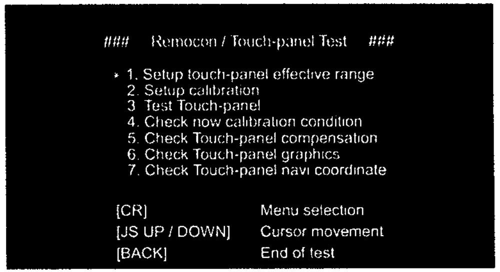
Version No. for BOOT section = X.XX System software does not exist in SDRAM.
Version No. for BOOT section = X.XX Version No. for SDRAM = Y.YY

● Remocon touch panel test

- How to operate the touch panel test mode is described below.
- First, "1. Setup touch-panel effective range" in the touch panel test menu is made.
- Next, "3. Test Touch-panel", and if the result is OK, then EXIT the screen.
- If the result is NG, conduct "2. Setup calibration", and conduct "3. Test Touch-panel" once again. If the result is OK, then EXIT the screen.
- Furthermore, details of the misalignment can be verified by the "5. Check Touch-panel compensation".

*) When inspecting the touch panel, use something thin with a round tip such as the touch pen. Furthermore, do not apply excessive force to the touch panel.

Main Menu

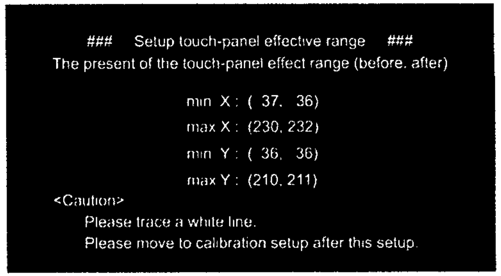


```
####    Remocon / Touch-panel Test    ###

 * 1. Setup touch-panel effective range
   2. Setup calibration
   3  Test Touch-panel
   4. Check now calibration condition
   5. Check Touch-panel compensation
   6. Check Touch-panel graphics
   7. Check Touch-panel navi coordinate

[CR]                Menu selection
[JS UP / DOWN]      Cursor movement
[BACK]              End of test
```

"*" mark shown on the left side of menu item "1" indicates that the setting has been completed. The setting items where "*" is actually indicated will be "1. Setup ~" and "2. Setup ~" only.

[CR]	Enter
[UP/DOWN]	Selection of the inspection item
[BACK]	Return (to the test mode menu)

1. Setup touch-panel effective range



```
        ###    Setup touch-panel effective range    ###
  The present of the touch-panel effect range (before. after)

                    min  X :  (  37,   36)
                    max X :  (230, 232)
                    min  Y :  (  36,   36)
                    max Y :  (210, 211)
  <Caution>
       Please trace a white line.
       Please move to calibration setup after this setup.
```

Adjustment steps

1) Trace the edge of the screen along the monitor resin frame with a round-headed thing to obtain the coordinates.
2) Press the [BACK] key.

Explanation of the displays
min_x(A,B) : X coordinate of the touch panel • minimum value received
max_x(A,B) : X coordinate of the touch panel • maximum value received
min_y(A,B) : Y coordinate of the touch panel • minimum value received
max_y(A,B) : Y coordinate of the touch panel • maximum value received

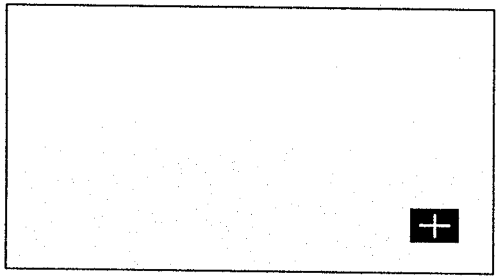
A = A coordinate which is already stored in the SRAM (If there is no previous data in the SRAM, "min=90, max=180" will be displayed).

B = An updated coordinate which is planned to be set in the SRAM this time (If there is no previous data in the SRAM, "min=90, max=180" will be displayed).

[BACK] : The preset effective range is registered, and the screen will return to the remote controller inspection menu. The data of the effective range will be recorded in the SRAM.

In case the compensation value is not preset in the SRAM, the following initial (default) value will be entered automatically at the time of navigation system boot up.
min_x = 42 (right edge limit value)
max_x = 246 (left edge limit value)
min_y = 49 (bottom edge limit value)
max_y = 238 (top edge limit value)

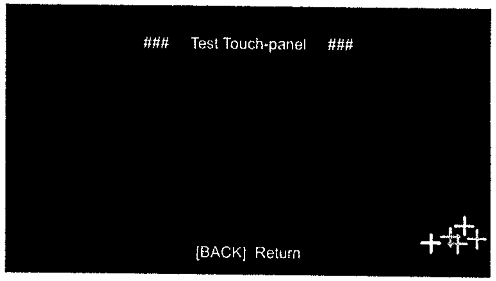
2. Setup calibration



Explanation

- A [+] cursor is displayed at 16 locations on the screen for calibration. Finally, verification of a single point is made. The cursor is always displayed at one location only, and moves on to the next location as the current one is correctly pressed.
- When pressing on the [+] cursor, make sure to press at the center of "+".
- The result of calibration will be recorded in the SRAM.
- If effective operation is not made for 30 seconds, the system will recognize as "erroneous end" and stops the calibration.

3. Test Touch-panel



### Test Touch-panel ###

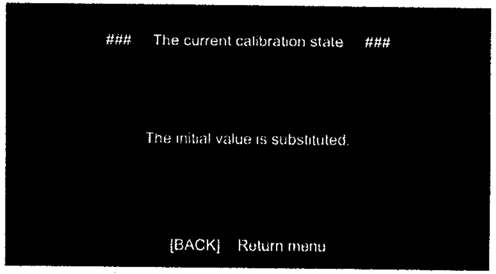
[BACK] Return

Explanation on touch panel misalignment verification test.

1) The test is intended to verify if the touched point on the touch panel is correctly recognized or not.
   [+] cursor will be displayed at 16 locations on the screen.
   The cursor will be displayed in "white color" only one at a time.
   Each time the cursor is touched correctly, the next point will be displayed.
   On the other hand, if it is recognized that the point touched was ±4 dots vertically and ±5 dots horizontally away from the center of the displayed [+] cursor, the erroneously recognized coordinate [+] will be drawn in "red color".
2) When touching the [+] cursor, touch the center of the + mark correctly.
3) If [BACK] is touched, the test will be finished, and the screen will return to the menu screen of the touch panel test mode.

If this test turns out to be NG, it will be necessary to redo "1. Setup touch-panel effective range" and "2. Setup calibration". Repeat the above steps once again.

4. Check now calibration codition



### The current calibration state ###

The initial value is substituted.

[BACK] Return menu

Explanation on the setting status of the calibration compensation value.
The current calibration compensation status is displayed.
The following data will be displayed.

"With no calibration value" (in white characters)
In case the compensation value does not exist in the SRAM.

"The effective range value is stored"
In case the compensation value for the upper limit and the lower limit are preset in the SRAM.

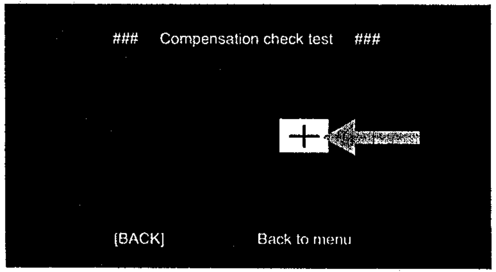
"The calibration compensation value is stored"
In case the calibration compensation values for the 16 points are preset in the SRAM.

"The effective range & calibration value is stored."
In case the upper limit and the lower limit values and the 16 points calibration values are preset in the SRAM.

"The initial value is substituted."
In case the value stored as the initial (default) value is preset in the SRAM.

"Error Condition"
In case the SRAM value is demolished or some unexpected situation is happening.

5. Check Touch-panel compensation

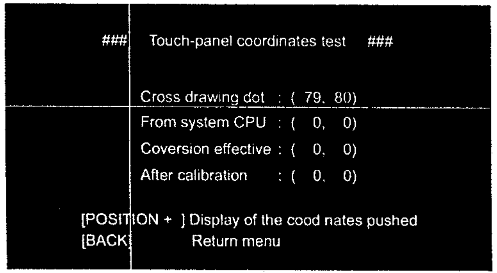


```
### Compensation check test ###

[BACK]          Back to menu
```

[BACK] : The system will return to the remote controller inspection menu.

Explanation of the inspection details
- Regarding this inspection, the title only will be displayed at the initialized stage.
- As shown by the arrow, press any desired location on the monitor.
- A coordinate after the calibration correction will be displayed by the [+] mark against the coordinate recognized as pressed.

6. Check Touch-panel graphics

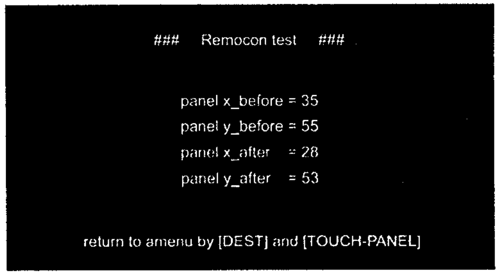


```
###  Touch-panel coordinates test   ###

     Cross drawing dot  : ( 79, 80)
     From system CPU    : (  0,  0)
     Coversion effective : (  0,  0)
     After calibration  : (  0,  0)

[POSITION +  ] Display of the cood nates pushed
[BACK]         Return menu
```

[NAVI] + pressing the touch panel : The coordinate of the touch panel at that time will be displayed.
[↑] : Horizontal line will move upward.
[↓] : Horizontal line will move downward.
[←] : Vertical line will move to the left.
[→] : Vertical line will move to the right.
[BACK] : The system will return to the remote controller inspection menu.

Explanation of the displayed coordinate (from top to bottom)
(79, 80) : Coordinate of the crossing point by the vertical and the horizontal lines (X direction, Y direction). [(0~500, 0~240)]
(0, 0) : AD data value (X direction, Y direction) representing the coordinate of the pressed location received from the system control microprocessor.
(0, 0) : Coordinate (X direction, Y direction) obtained by normalizing the AD data value of the pressed location within the effective range.
(0, 0) : Coordinate (X direction, Y direction) obtained by adding the correction based on calibration to the normalized coordinate.

7. Check Touch-panel navi coordinate

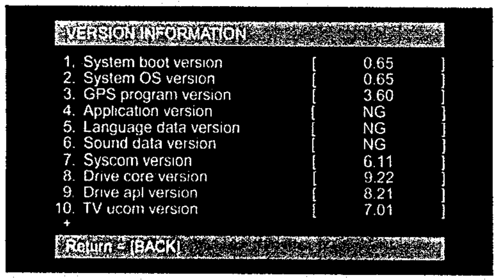


```
###  Remocon test  ###

panel x_before = 35
panel y_before = 55
panel x_after  = 28
panel y_after  = 53

return to amenu by [DEST] and [TOUCH-PANEL]
```

[BACK] + pressing the touch panel will make the system return to the remote controller inspection menu.

Explanation of the displayed content.
panel x_before : X coordinate normalized (expanded) within the effective range.
panel y_before : Y coordinate normalized (expanded) within the effective range.
panel x_after : X coordinate obtained by adding the correction based on calibration.
panel y_after : Y coordinate obtained by adding the correction based on calibration.

● Version check



```
VERSION INFORMATION
 1. System boot version      [   0.65   ]
 2. System OS version        [   0.65   ]
 3. GPS program version      [   3.60   ]
 4. Application version      [   NG     ]
 5. Language data version    [   NG     ]
 6. Sound data version       [   NG     ]
 7. Syscom version           [   6.11   ]
 8. Drive core version       [   9.22   ]
 9. Drive apl version        [   8.21   ]
10. TV ucom version          [   7.01   ]
 +
Return = [BACK]
```

	item	content	information	filename
1	System boot version	Version information of the system software BOOT section (FLASH) is displayed.	**.** -> Version information of the system software BOOT section	EW040BOT.GBR UC040BOT.GBR
2	System OS version	Version information of the system software OS section (FLASH) is displayed.	**.** -> Version information of the system software OS section NG -> System program doesn't exist.	EW040SYS.xxx (xxx : GBR, DEU, FRA, ITA, NLD, ESP, SWE, DNK) UC040DAT yyy (yyy : USA, FRA, ESP)
3	GPS program version	Version information of the GPS program (DRAGON) is displayed.	**.** -> Version information of the GPS program NG -> GPS program doesn't exist.	EW040GPS.PRG UC040SYS.PRG
4	Application version	Version information of the application program (FLASH) is displayed.	**.** -> Version information of the application program NG -> Application program doesn't exist.	EU040APL.PRG
5	Language data version	Version information of the language data (FLASH) is displayed.	**.** -> Version information of the language data NG -> Language data doesn't exist.	EW040DAT.xxx (xxx : GBR, DEU, FRA, ITA, NLD, ESP, SWE, DNK) UC040DAT.yyy (yyy : USA, FRA, ESP)
6	Sound data version	Version information of the sound data (FLASH) is displayed.	**.** -> Version information of the sound data NG -> Sound data doesn't exist.	EW040SDF.xxx (xxx : GBR, DEU, FRA, ITA, NLD, ESP, SWE, DNK, BEL) UC040SDF.yyy (yyy : USA, FRA, ESP)
7	Syscom version	Version information of the system microprocessor is displayed.	**.** -> Version information of the system microprocessor NG -> Communication with the system microprocessor has not been established.	
8	Drive core version	Core version information of the microprocessor for mechanism control is displayed (V+R)	**.** -> Core version information of the microprocessor for mechanism control NG -> Communication with the microprocessor for mechanism control has not been established. NON -> ROM only mechanism	
9	Drive apl version	Application version information of the microprocessor for mechanism control is displayed (V+R)	**.** -> Application version information of the microprocessor for mechanism control NG -> Communication with the microprocessor for mechanism control has not been established. NON -> ROM only mechanism	
10	TV ucom version	Version information of the microprocessor for TV is displayed	**.** -> Version information of the microprocessor for TV NG -> Communication with the microprocessor for TV has not been established.	
11	Monitor ucom version	Version information of the microprocessor for Monitor is displayed	**.** -> Version information of the microprocessor for Monitor NG -> Communication with the microprocessor for Monitor has not been established.	
12	System language	System language file in the system program (FLASH) is displayed	**.** -> System language program file name NG -> System language data doesn't exist.	EW040SYS.xxx (xxx : GBR, DEU, FRA, ITA, NLD, ESP, SWE, DNK, BEL) UC040SYS.yyy (yyy : USA, FRA, ESP)
13	Application language	Application language data file (FLASH) is displayed	**.** -> Application language data file name NG -> Application language data doesn't exist.	EW040DAT.xxx (xxx : GBR, DEU, FRA, ITA, NLD, ESP, SWE, DNK, BEL) UC040DAT.yyy (yyy : USA, FRA, ESP)
14	Sound data language	Language sound data file (FLASH) is displayed	**.** -> Language sound data file name NG -> Language sound data doesn't exist.	EW040SDF.xxx (xxx : GBR, DEU, FRA, ITA, NLD, ESP, SWE, DNK, BEL) UC040SDF.yyy (yyy : USA, FRA, ESP)

● Error Information

1. Error Information

Descriptions of error information, for errors arising from system software problems, will be provided in this section.

Up to eight sets of information, related to the system software's errors, will be stored in the SRAM.

By executing hi_sysdwn( ) the line number (on which the error occurred), the error code and detailed information of the error, will be stored in the error log.

Hi_sysdwn( ) will be executed in the following two circumstances:

1. hi_sysdwn( ) will be intentionally stored if fatal errors occur with each BIOS.
2. If multiple exceptions, fatal exceptions, illegal command codes and trap command errors occur.

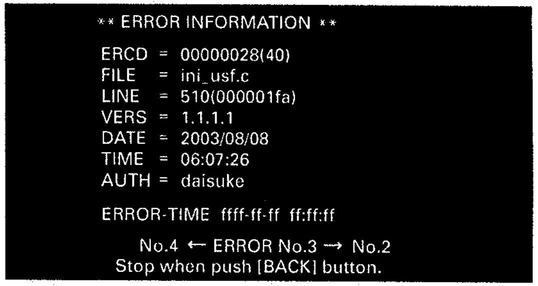
2. Error Log's Entry Function

Up to twenty-four sets of information, related to errors starting with the latest error, will be displayed by the error log entry function.

There are two types of error log displays.

The display will vary when the argument provided to hi_sysdwn( ), depending on whether detailed information (such as program name, version number, creation date, creation time and creator name) exists or not.

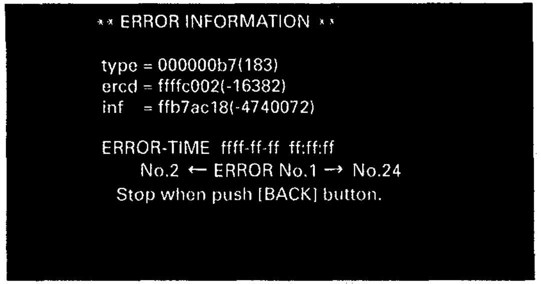
1. When detailed information exists:



```
      ** ERROR INFORMATION **

ERCD  =  00000028(40)
FILE  =  ini_usf.c
LINE  =  510(000001fa)
VERS  =  1.1.1.1
DATE  =  2003/08/08
TIME  =  06:07:26
AUTH  =  daisuke

ERROR-TIME  ffff-ff-ff  ff:ff:ff

     No.4 ← ERROR No.3 → No.2
   Stop when push [BACK] button.
```

ERCD	Error code.
FILE	Error occurring program name.
LINE	Error occurring program line number.
VERS	Error occurring program version number.
DATE	Error occurring program creation date.
TIME	Error occurring program creation time.
AUTH	Error occurring program creator name.
ERROR-TIME	Error occurrence date and time.

2. When detailed information does not exist:



```
** ERROR INFORMATION **

type = 000000b7(183)
ercd = ffffc002(-16382)
inf  = ffb7ac18(-4740072)

ERROR-TIME  ffff-ff-ff  ff:ff:ff
     No.2 ← ERROR No.1 → No.24
   Stop when push [BACK] button.
```

type	Error occurring program line number.
ercd	Error code.
inf	System down information.
ERROR-TIME	Error occurrence date and time.

If an error occurs due to a multiple exception, the definitions will change to the following:

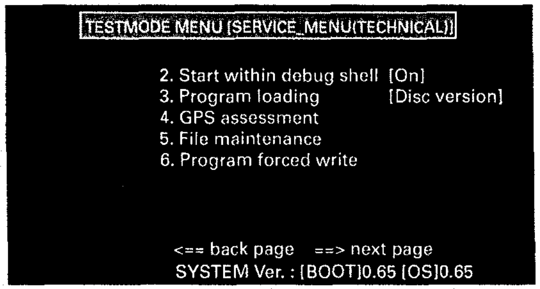
type	Execution address at the time of error occurrence.
ercd	Contributing factor for the exceptions.
inf	Program status word at the time of error occurrence.
ERROR-TIME	Error occurrence date and time.

3. Error Information Switch

The product (with default settings) will display error messages to the user if an error occurs.
Error information can be displayed if an error occurs by switching the error information in the test mode.
In either case, the error log entry display will be the same.

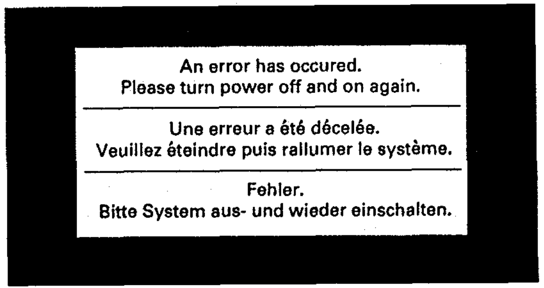
1) Error message display (default settings):

- Setting in the test mode:



```
TESTMODE MENU [SERVICE_MENU(TECHNICAL)]

        2. Start within debug shell  [On]
        3. Program loading           [Disc version]
        4. GPS assessment
        5. File maintenance
        6. Program forced write



          <== back page    ==> next page
          SYSTEM Ver. : [BOOT]0.65 [OS]0.65
```

- Display when an error occurs:



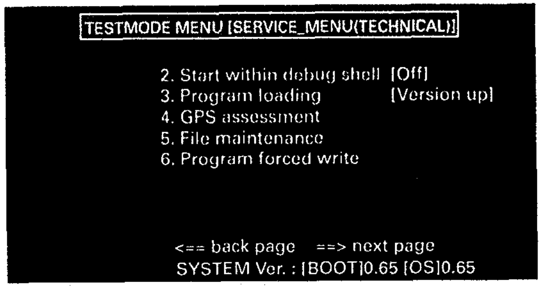
An error has occured.
Please turn power off and on again.

Une erreur a été décelée.
Veuillez éteindre puis rallumer le système.

Fehler.
Bitte System aus- und wieder einschalten.

2) Error information display

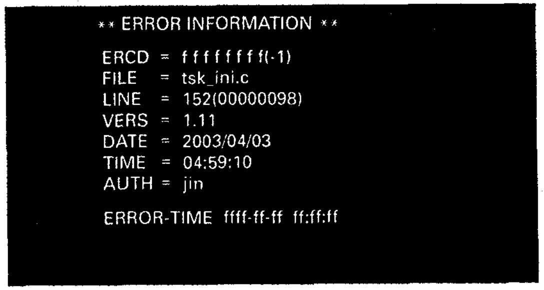
- Settings in the test mode:



```
TESTMODE MENU [SERVICE_MENU(TECHNICAL)]

        2. Start within debug shell  [Off]
        3. Program loading           [Version up]
        4. GPS assessment
        5. File maintenance
        6. Program forced write



          <== back page    ==> next page
        SYSTEM Ver. : [BOOT]0.65 [OS]0.65
```

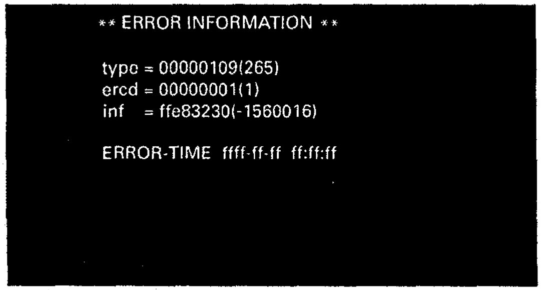
Display when an error occurs:

- If error information exists:



```
** ERROR INFORMATION **

ERCD  =  ffffffff(-1)
FILE  =  tsk_ini.c
LINE  =  152(00000098)
VERS  =  1.11
DATE  =  2003/04/03
TIME  =  04:59:10
AUTH  =  jin

ERROR-TIME  ffff-ff-ff  ff:ff:ff
```

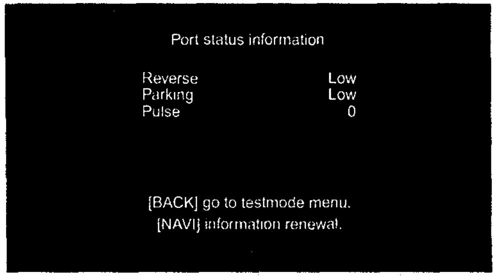
- If error information does not exist:



```
** ERROR INFORMATION **

typc = 00000109(265)
ercd = 0000001(1)
inf  = ffe83230(-1560016)

ERROR-TIME  ffff-ff-ff  ff:ff:ff
```

4. Watch dog timer
This product has a built-in mechanism to monitor at a certain interval whether the software is correctly operating or not.
Once this mechanism becomes inoperable, "reset request" will be sent to the power supply microprocessor when a preset time (approximately 4 seconds) has elapsed.
In order to record operational situation of such an occasion, a special code which is not an error code is recorded in the ERCD.

● Port status information

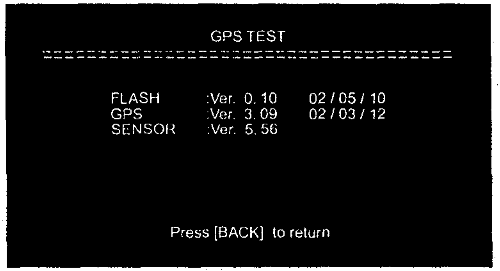


```
Port status information

Reverse          Low
Parking          Low
Pulse              0


[BACK] go to testmode menu.
[NAVI] information renewal.
```

Display	Content of inspection
Reverse	Reverse port status
Parking	Parking port status
Pulse	Pulse status

How to operate.
[BACK] : Return to the test mode menu.
[NAVI] : Update of the port status.

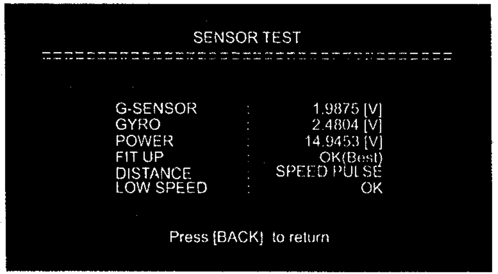
● GPS assessment



```
GPS TEST
========================================

FLASH    :Ver. 0. 10    02 / 05 / 10
GPS      :Ver. 3. 09    02 / 03 / 12
SENSOR   :Ver. 5. 56


Press [BACK]  to return
```

FLASH	Display of DRAGON FLASH ROM version information.
GPS	Display of GPS version information.
SENSOR	Display of sensor version information.

● SENSOR test



```
SENSOR TEST
==========================================

G-SENSOR     :      1.9875 [V]
GYRO         :      2.4804 [V]
POWER        :     14.9453 [V]
FIT UP       :       OK(Best)
DISTANCE     :    SPEED PULSE
LOW SPEED    :             OK

Press [BACK]  to return
```

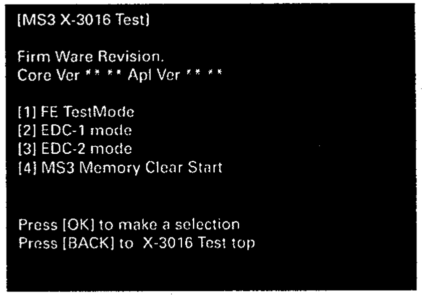
G-SENSOR	Display of G sensor voltage		
GYRO	Display of gyro voltage		
POWER	Display of power supply voltage		
FIT UP	Display of installation status		
	Display	Status	
	• NG	Installation position is NG.	
	• OK	Installation position is OK. (3rd best)	
	• OK (Better)	Installation position is OK. (2nd best)	
	• OK (Best)	Installation position is OK. (Best)	
DISTANCE	Display of distance calculation status.		
	Display	Status	
	• INITIALIZE	Sensor initial learning is under way.	
	• GPS	GPS distance. (Model without G sensor. No pulse connection.)	
	• G-SENSOR	G sensor distance. (simple hybrid.)	
	• ND-PG1	ND-PG1 distance.	
	• SPEED PULSE	Vehicle speed pulse distance.	
LOW SPEED	Display of minimum output speed of a low speed NG vehicle. (Depends on DISTANCE status.)		
	DISTANCE status	SPEED PULSE status	Display
	SPEED PULSE	Low vehicle speed pulse learning is under way.	CHECK
		Low vehicle speed pulse is OK.	OK
		Low vehicle speed is NG.	NG xx[km/h]
	Others		- - - - -

● DVD Test Modes

CAUTIONS
Protection is not operational against a mechanical runaway conditions during servo testing.
Critical damage can result if the system is allowed to continue in a mechanical runaway state.
If abnormal noise is heard during the test, turn the power OFF immediately.

Keys used for the DVD test mode
[OK] : Selection decided.
[BACK] : Go back.
Directional keys : [↑ ↓ ← →] keys

[MS3 X-3016 Test]

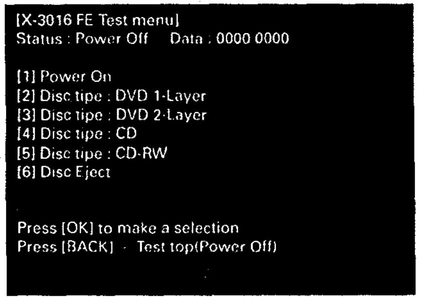


```
[MS3 X-3016 Test]

Firm Ware Revision.
Core Ver ** ** Apl Ver ** **

[1] FE TestMode
[2] EDC-1 mode
[3] EDC-2 mode
[4] MS3 Memory Clear Start


Press [OK] to make a selection
Press [BACK] to  X-3016 Test top
```

Firm Ware Revision : Version of the drive used.

[1]	Start the FE test mode.
[2]	EDC1 mode (available for DVDs only).
[3]	EDC2 mode (available for DVDs only).
[4]	Executes the MS3 memory cleaning operation.
[OK]	Executes.
[BACK]	Returns to the test mode menu.

[X-3016 FE Test menu]

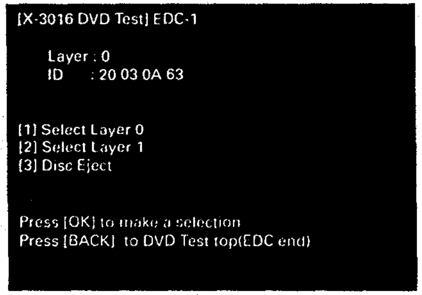


```
[X-3016 FE Test menu]
Status : Power Off    Data : 0000 0000

[1] Power On
[2] Disc tipe : DVD 1-Layer
[3] Disc tipe : DVD 2-Layer
[4] Disc tipe : CD
[5] Disc tipe : CD-RW
[6] Disc Eject


Press [OK] to make a selection
Press [BACK] · Test top(Power Off)
```

Status : "Power Off (during normal conditions)."

[1]	Power On (proceed to servo test 1-0).
[2]	Disc type : DVD single-layer.
[3]	Disc type : DVD double-layer.
[4]	Disc type : CD.
[5]	Disc type : CD-RW.
[6]	Ejects the Disc.
[OK]	Executes.
[BACK]	Returns to the initial screen display for the test.

[X-3016 DVD Test]

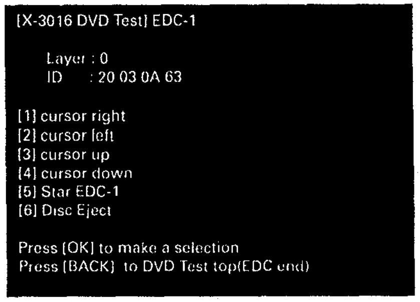


```
[X-3016 DVD Test] EDC-1

      Layer : 0
      ID     : 20 03 0A 63


[1] Select Layer 0
[2] Select Layer 1
[3] Disc Eject


Press [OK] to make a selection
Press [BACK]  to DVD Test top(EDC end)
```

EDC-1 : Performs consecutive EDC tests.
EDC-2 : Performs EDC tests for each block.
ID : Performs ID of the test.

[1]	Select layer 0.
[2]	Select layer 1.
[3]	Ejects the Disc.
[OK]	Executes.
[BACK]	Returns to the test mode menu.

[X-3016 DVD Test]

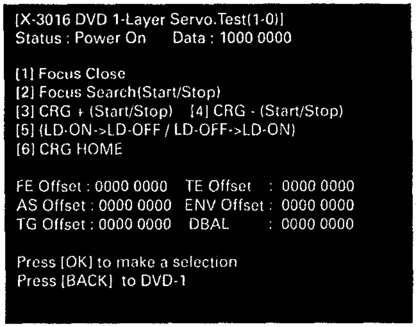


```
[X-3016 DVD Test] EDC-1

      Layer : 0
      ID     : 20 03 0A 63

[1] cursor right
[2] cursor left
[3] cursor up
[4] cursor down
[5] Star EDC-1
[6] Disc Eject

Press [OK] to make a selection
Press [BACK]  to DVD Test top(EDC end)
```

EDC-1 : Performs consecutive EDC tests.
EDC-2 : Performs EDC tests for each block.
ID : Performs ID of the test.

[1]	Moves the cursor to the right by one increment.
[2]	Moves the cursor to the left by one increment.
[3]	Moves the cursor up by one increment.
[4]	Moves the cursor down by one increment.
[5]	Starts the EDC test.
[6]	Ejects the Disc.
[OK]	Executes.
[BACK]	Returns to the test mode menu.

[X-3016 DVD 1-Layer Servo. Test(1-0)]



```
[X-3016 DVD 1-Layer Servo.Test(1-0)]
Status : Power On     Data : 1000 0000

[1] Focus Close
[2] Focus Search(Start/Stop)
[3] CRG + (Start/Stop)   [4] CRG - (Start/Stop)
[5] (LD-ON->LD-OFF / LD-OFF->LD-ON)
[6] CRG HOME

FE Offset : 0000 0000   TE Offset    :  0000 0000
AS Offset : 0000 0000   ENV Offset :  0000 0000
TG Offset : 0000 0000    DBAL          :  0000 0000

Press [OK] to make a selection
Press [BACK]  to DVD-1
```

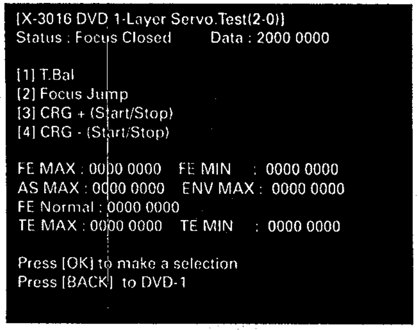
Test items are basically the same for both DVDs and CDs.

Status : "Power On (during normal conditions)."

[1]	Closes in on the focus (proceed to servo test 2-0).
[2]	Performs a focus search operation (S-curve measurement). Focus operation will then be stopped.
[3]	Moves the carriage (external). The carriage transition operation will then be stopped.
[4]	Moves the carriage (internal). The carriage transition operation will then be stopped.
[5]	Performs LD-ON/OFF operation.
[6]	Returns the carriage to the home position.
[BACK]	Returns to the DVD test menu screen display.

* This operation will not be performed until the coefficient figures have been received.
* Focus closing and searching will not operate unless the LD-ON setting is made to less than 9 seconds.

[X-3016 DVD 1-Layer Servo. Test(2-0)]



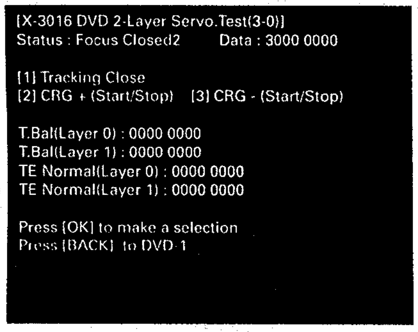
```
[X-3016 DVD 1-Layer Servo.Test(2-0)]
Status : Focus Closed        Data : 2000 0000

[1] T.Bal
[2] Focus Jump
[3] CRG + (Start/Stop)
[4] CRG - (Start/Stop)

FE MAX : 0000 0000    FE MIN    : 0000 0000
AS MAX : 0000 0000    ENV MAX : 0000 0000
FE Normal : 0000 0000
TE MAX : 0000 0000    TE MIN    : 0000 0000

Press [OK] to make a selection
Press [BACK]  to DVD-1
```

Test items are basically the same for both DVDs and CDs.

Status : "Focus Close (during normal conditions)."
[1] Adjusts tracking balance (proceeds to servo test 3-0).
[2] Performs a focus jump operation.
[3] Moves the carriage (external). The carriage transition operation will then be stopped.
[4] Moves the carriage (internal). The carriage transition operation will then be stopped.
[BACK] Returns to the DVD test menu screen display.

* This operation will not be performed until the coefficient figures have been received.

[X-3016 DVD 2-Layer Servo. Test(3-0)]



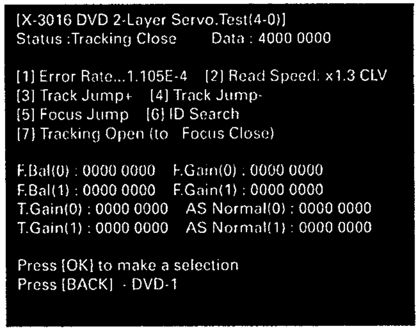
```
[X-3016 DVD 2-Layer Servo.Test(3-0)]
Status : Focus Closed2        Data : 3000 0000

[1] Tracking Close
[2] CRG + (Start/Stop)    [3] CRG - (Start/Stop)

T.Bal(Layer 0) : 0000 0000
T.Bal(Layer 1) : 0000 0000
TE Normal(Layer 0) : 0000 0000
TE Normal(Layer 1) : 0000 0000

Press [OK] to make a selection
Press [BACK]  to DVD-1
```

Test items are basically the same for both DVDs and CDs.

Status : "Focus Close 2 (during normal conditions)."
[1] Performs tracking close operation (proceeds to servo test 4-0).
[3] Moves the carriage (external). The carriage transition operation will then be stopped.
[4] Moves the carriage (internal). The carriage transition operation will then be stopped.
[BACK] Returns to the DVD test menu screen display.

* This operation will not be performed until the coefficient figures have been received.

[X-3016 DVD 2-Layer Servo. Test(4-0)]



```
[X-3016 DVD 2-Layer Servo.Test(4-0)]
Status :Tracking Close        Data : 4000 0000

[1] Error Rate...1.105E-4    [2] Read Speed: x1.3 CLV
[3] Track Jump+    [4] Track Jump-
[5] Focus Jump    [6] ID Search
[7] Tracking Open (to   Focus Close)

F.Bal(0) : 0000 0000    F.Gain(0) : 0000 0000
F.Bal(1) : 0000 0000    F.Gain(1) : 0000 0000
T.Gain(0) : 0000 0000    AS Normal(0) : 0000 0000
T.Gain(1) : 0000 0000    AS Normal(1) : 0000 0000

Press [OK] to make a selection
Press [BACK]  - DVD-1
```

Test items are basically the same for both DVDs and CDs.

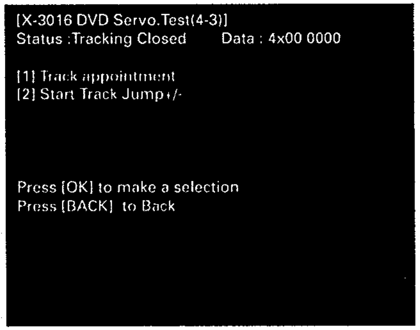
Status : "Tracking Close (during normal conditions)."
[1] [OK] triggers measurement of the error rates (other operations can not be performed for approximately 10 seconds.
[2] [OK] triggers switching of the reproduction speed.
[3] Performs track jumping by a designated number of tracks (external).
[4] Performs track jumping by a designated number of tracks (internal).
[5] Performs a focus jump operation (for DVDs only).
[6] Designates an ID (for DVDs only).
[7] Performs a tracking open operation (for the focus close status : will proceed to servo test 2-0).
[BACK] Returns to the DVD test menu screen display.

*** This operation will not be performed until the coefficient figures have been received.**

Reproduction speeds

L0-layer	**DVD x 1.3CLV, CD x 2**	**4000 0000**
L0-layer	**DVD x 1CLV**	**4200 0000**
L1-layer	**DVD x 1.3CLV**	**4100 0000**
L1-layer	**DVD x 1CLV**	**4300 0000**

[X-3016 DVD Servo. Test(4-3)]

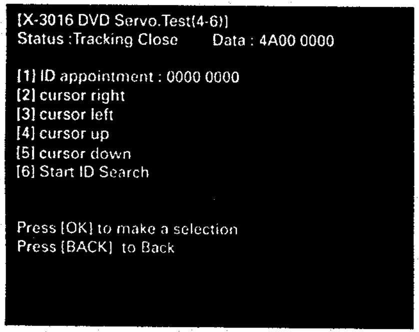


```
[X-3016 DVD Servo.Test(4-3)]
Status :Tracking Closed        Data : 4x00 0000

[1] Track appointment
[2] Start Track Jump+/-

Press [OK] to make a selection
Press [BACK]  to Back
```

Test items are basically the same for both DVDs and CDs.

Status : "Tracking Close (during normal conditions)."
[1] Performs a track number designation (MS3 cyclically switches the available patterns).
[2] Starts the tracking jump operation (will proceed to servo test 4-0).

[X-3016 DVD Servo. Test(4-6)]



[X-3016 DVD Servo.Test(4-6)]
Status :Tracking Close Data : 4A00 0000

[1] ID appointment : 0000 0000
[2] cursor right
[3] cursor left
[4] cursor up
[5] cursor down
[6] Start ID Search

Press [OK] to make a selection
Press [BACK] to Back

Available for DVDs only.

Status : "Tracking Close (during normal conditions)."

[1] Displays designated ID.
[2] Moves the cursor to the right by one increment.
[3] Moves the cursor to the left by one increment.
[4] Moves the cursor up by one increment.
[5] Moves the cursor down by one increment.
[6] Starts the ID search operation (return to servo test 4-0).

Display data of adjustment value

FE Offset	FE offset coefficient	0000 0000[h] - FFFF FFFF[h]
TE Offset	TE offset coefficient	0000 0000[h] - FFFF FFFF[h]
AS Offset	AS offset coefficient	0000 0000[h] - FFFF FFFF[h]
ENV Offset	ENV offset coefficient	0000 0000[h] - FFFF FFFF[h]
TG Offset	TG offset coefficient	0000 0000[h] - FFFF FFFF[h]
DBAL	DBAL offset coefficient	0000 0000[h] - FFFF FFFF[h]
FE MAX	FE MAX level	0000 0000[h] - FFFF FFFF[h]
FE MIN	FE MIN level	0000 0000[h] - FFFF FFFF[h]
AS MAX	AS MAX level	0000 0000[h] - FFFF FFFF[h]
ENV MAX	ENV MAX level	0000 0000[h] - FFFF FFFF[h]
FE Normal	FE normalize coefficient	0000 0000[h] - FFFF FFFF[h]
S.Gain	Spindle gain coefficient	0000 0000[h] - FFFF FFFF[h]
T.Bal (layer-0)	TBAL coefficient (layer-0)	0000 0000[h] - FFFF FFFF[h]
T.Bal (layer-1)	TBAL coefficient (layer-1)	0000 0000[h] - FFFF FFFF[h]
G.Bal (layer-0)	GBAL coefficient (layer-0)	0000 0000[h] - FFFF FFFF[h]
G.Bal (layer-1)	GBAL coefficient (layer-1)	0000 0000[h] - FFFF FFFF[h]
TE Normal (layer-0)	TE normalize coefficient (layer-0)	0000 0000[h] - FFFF FFFF[h]
TE Normal (layer-1)	TE normalize coefficient (layer-1)	0000 0000[h] - FFFF FFFF[h]
F.Bal (layer-0)	FBAL coefficient (layer-0)	0000 0000[h] - FFFF FFFF[h]
F.Bal (layer-1)	FBAL coefficient (layer-1)	0000 0000[h] - FFFF FFFF[h]
F.Gain (layer-0)	Focus gain coefficient (layer-0)	0000 0000[h] - FFFF FFFF[h]
F.Gain (layer-1)	Focus gain coefficient (layer-1)	0000 0000[h] - FFFF FFFF[h]
T.Gain (layer-0)	Tracking gain coefficient (layer-0)	0000 0000[h] - FFFF FFFF[h]
T.Gain (layer-1)	Tracking gain coefficient (layer-1)	0000 0000[h] - FFFF FFFF[h]
AS Normal (layer-0)	AS normalize adjustment value (layer-0)	0000 0000[h] - FFFF FFFF[h]
AS Normal (layer-1)	AS normalize adjustment value (layer-1)	0000 0000[h] - FFFF FFFF[h]

6.8 USING THE TEST DISC

TEST DISC Part No. : GGV1137

REMOTE CONTROLLER Part No.

Part No.	Description
CXB7427	Co-packed remote controller with AVIC-8DVD/EW
CXB7426	Co-packed remote controller with AVIC-9DVD/EW, UC
CXB9118	Co-packed remote controller with AVIC-8DVD-2/EW, -9DVD-2/EW, -90DVD/UC
CD-R11	Optional remote controller

1. Start/End

1-1. Start

When the test disc is inserted, the title "NN622/NN623 TEST DISC" will be displayed.
If [RETURN] key is pressed while the title is being displayed, the menu screen will be displayed. If no key is pressed, the first screen of the inspection screen for line will be displayed.

Title screen

NN622 / NN623 TEST DISC

1-2. End

No action is taken.

2. Key operation

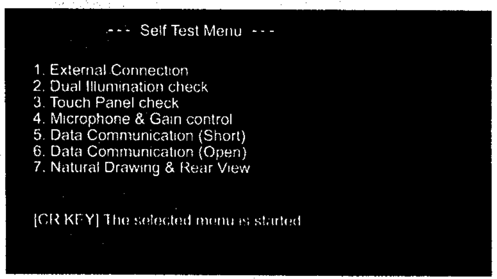
- In the case of inspection screen for line
  1. The inspection screen and the menu screen can be switched alternately using the [CR] key on the remote controller.
  2. The screen will go back to the previous screen by the [↑] key on the remote controller.
  3. The screen will move forward to the next screen by the [↓] key on the remote controller.
     (Unless the inspection is finished, the screen will not move forward. The screen will not move forward, too, if there is an NG item.)

  * Refer to the explanation of each screen for the details.

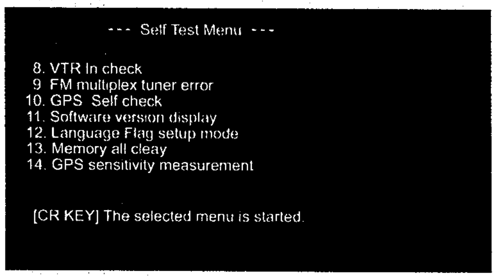
- In the case of service menu screen
  1. Select an inspection item by the [↑] and [↓] keys on the remote controller, and inspection screen will appear when the [CR] key is pressed.
  2. When the [RETURN] key on the remote controller is pressed, the screen will go back to the menu screen.

  * Refer to the explanation of each screen for the details.

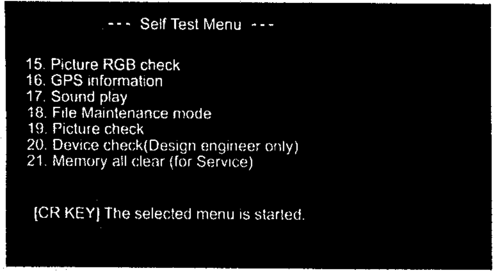
Menu screens



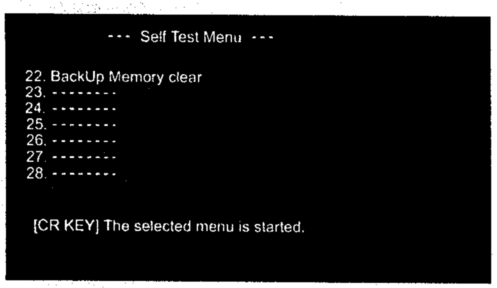
```
--- Self Test Menu ---

1. External Connection
2. Dual Illumination check
3. Touch Panel check
4. Microphone & Gain control
5. Data Communication (Short)
6. Data Communication (Open)
7. Natural Drawing & Rear View


[CR KEY] The selected menu is started
```



```
--- Self Test Menu ---

 8. VTR In check
 9. FM multiplex tuner error
10. GPS  Self check
11. Software version display
12. Language Flag setup mode
13. Memory all cleay
14. GPS sensitivity measurement


[CR KEY] The selected menu is started.
```



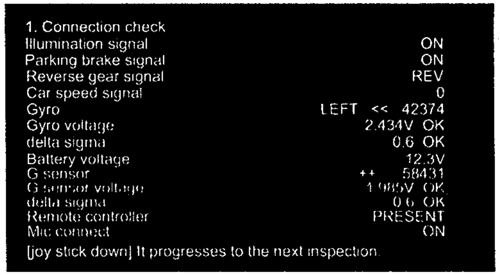
```
--- Self Test Menu ---

15. Picture RGB check
16. GPS information
17. Sound play
18. File Maintenance mode
19. Picture check
20. Device check(Design engineer only)
21. Memory all clear (for Service)


[CR KEY] The selected menu is started.
```



```
--- Self Test Menu ---

22. BackUp Memory clear
23. --------
24. --------
25. --------
26. --------
27. --------
28. --------


[CR KEY] The selected menu is started.
```

3. Inspection screen

1. Connection check



```
1. Connection check
Illumination signal                       ON
Parking brake signal                      ON
Reverse gear signal                      REV
Car speed signal                           0
Gyro                          LEFT  <<  42374
Gyro voltage                      2.434V  OK
delta sigma                          0.6  OK
Battery voltage                        12.3V
G sensor                         ++    58431
G sensor voltage                  1.985V  OK
delta sigma                          0.6  OK
Remote controller                    PRESENT
Mic connect                               ON
[joy stick down] It progresses to the next inspection.
```

- The status of the item indicated in the above figure will be updated every second.
- Set ANTON port to H when starting the inspection and set to L when ending.
- When the gyro is in operation, a BEEP sound will be made when the G sensor is activated.
  Right: 500Hz, Left: 700Hz, Up: 800Hz, Down: 600Hz
- Conditions for moving on to the next inspection
  Illumination status is changing between ON and OFF.
  Parking brake status is changing between ON and OFF.
  Reverse status is changing between NOR and REV.
  Pulse is changing to a value other than 0/0.
  Mic connect status is changing between ON and OFF.
  All keys on the main body as listed below have been pressed at least once.

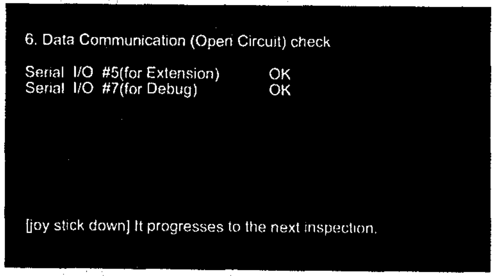
Standard value for other items
- GYRO voltage
  OK: 2.5±0.15
  USABLE: 2.5±0.30
- GYRO variation
  OK: Less than 30
- G sensor voltage
  OK: 2.5±0.15
  USABLE: 2.5±0.30
- G sensor variation
  OK: Less than 60

- Only when all the conditions are met, you can move on to the next inspection by the [↓] key on the remote controller. It should be noted, however, that you will not be able to move on to the next inspection if there is an error (background color is red) even if the conditions are met.

<Supplemental explanation regarding error display>

Displayed message	Details of the error
Structural data error	An error when data cannot be received from A/D converter. Defective device of the A/D converter seems to be the cause. It will also happen in case the vehicle speed pulse cannot be measured. (rare)
No connection to DRAGON	An error when communication with DRAGON cannot be established. Communication error due to a hardware problem could be the cause. It is highly possible that the hardware on the DRAGON side is defective.
Command error	Time out error for response to BIOS call. Communication error due to a hardware problem could be the cause. It is highly possible that the hardware on the DRAGON side is defective.
Unknown error	Error due to unknown reason.

6. Data Communication (Open Circuit) check (Not for service)

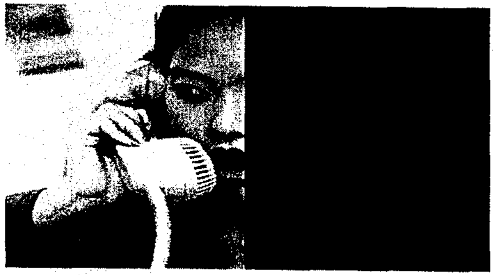

6. Data Communication (Open Circuit) check

Serial I/O #5(for Extension) OK
Serial I/O #7(for Debug) OK

[joy stick down] It progresses to the next inspection.

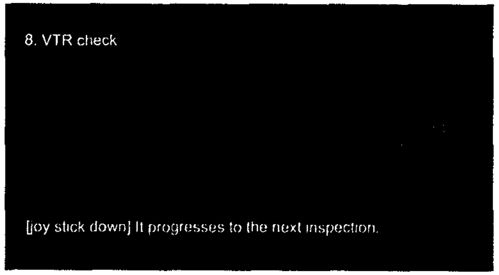
- SIO connection open is checked.
- Check is performed on 5CH and 7CH.
- Do not connect anything to the terminal. OK will be indicated under "open" condition.
- Wait screen is displayed until the checking is completed.
- When [RETURN] key on the remote controller is pressed while the inspection result is being displayed on the screen, inspection will be performed once again.
- Only in the case of OK, you can move on to the next inspection by the [↓] key on the remote controller.

7. Natural Drawing & Rear View



- Natural image consisting of 256 colors will be drawn on the BG screen.
- ADPCM 1kHz sine wave at the sampling rate of 19kHz will be output for 30 seconds.
- Rear view image will be displayed on the right hand side of the screen.
- GUIDEON terminal will be set to H when entering the screen, and set to L when exiting the screen.
- Volume level can be changed by the [←] and [→] keys on the remote controller. (0 to 9)
  [JPEG file name: ZHITO1.JPEG]
  [Voice file name: A19K01KS.WAV]
- You can move on to the next inspection by the [↓] key on the remote controller.

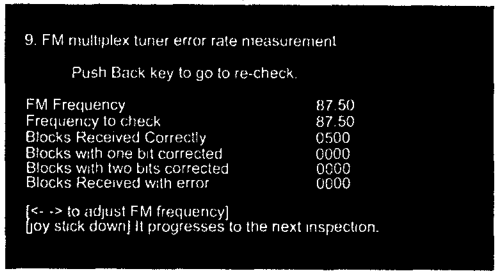
8. VTR check


8. VTR check

[joy stick down] It progresses to the next inspection.

- External input image (VTR input image) is displayed and voice is outputted.
- You can move on to the next inspection by the [↓] key on the remote controller.

9. FM multiplex tuner error rate measurement


9. FM multiplex tuner error rate measurement

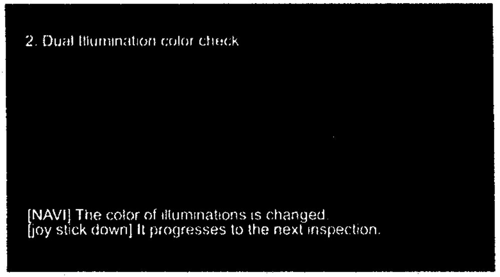
Push Back key to go to re-check.

```
FM Frequency                      87.50
Frequency to check                87.50
Blocks Received Correctly         0500
Blocks with one bit corrected     0000
Blocks with two bits corrected    0000
Blocks Received with error        0000
```

[<- -> to adjust FM frequency]
[joy stick down] It progresses to the next inspection.

- FM multiplexing error is measured.
- In the case of UC model, this inspection is not performed and the system will move on to the next inspection.
- Default frequency is 87.5MHz.
- When entering this mode for the first time, the result of measurement at the time of test disc boot up will be displayed.
- After the measurement is taken, the frequency can be changed by the [←] and [→] keys.
- 500 blocks will be measured, and if there are 450 or more blocks without error, then it will be determined as OK.
- Only in the case of OK, you can move on to the next inspection by the [↓] key on the remote controller.

2. Dual Illumination color check



2. Dual Illumination color check

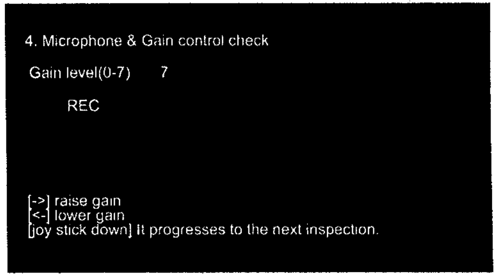
[NAVI] The color of illuminations is changed.
[joy stick down] It progresses to the next inspection.

- Color switching for dual illumination can be made.
- In the case of UC model, this inspection will not be performed, and the system will move on to the next inspection.
- Color is changed to GREEN/LED by the [NAVI] key on the remote controller.
- Move on to the next inspection by the [↓] key on the remote controller.

3. Touch Panel check

- Touch panel inspection must be performed at 16 locations.
- If the coordinate obtained by pressing the white spot is within the effective range, it will be determined as OK, and the next white spot will be displayed.
- If the coordinate obtained is outside of the effective range, it will be determined as NG.
- If all 16 locations turned out to be OK, then this test is considered to be OK.
- If coordinate cannot be obtained in approximately 5 seconds after the white spot is displayed, the inspection is determined as NG.
- Only if the inspection is OK, the inspection will move on to the next step by the [↓] key on the remote controller.

4. Microphone & Gain control check



4. Microphone & Gain control check

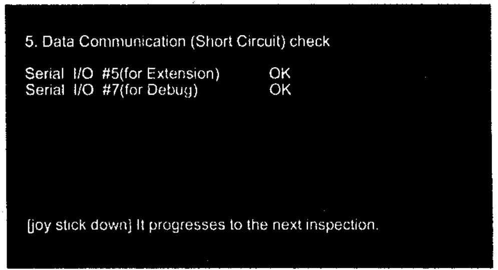
Gain level(0-7) 7

REC

[->] raise gain
[<-] lower gain
[joy stick down] It progresses to the next inspection.

- The voice channel is inspected by recording the voice from MIC input (Lch) on a memory, playing back the recorded data and outputting from the SP.
- Recording of MIC input voice and playback of the recorded data is done at every second. ("1 second recording → 1 second playback" will be repeated during inspection.) "REC" and "PLAY" will be displayed on the screen during recording and play back, respectively.
- Voice channel
  MIC voice input → ADC Lch input → ASIC voice block → Data storage (recorded on the memory)
  Play back of recorded voice data → ASIC voice block → DAC Lch output → SP output
- Operation (remote controller)
  [←] : MIC input gain (PROGGAIN0-2) is lowered.
  [→] : MIC input gain (PROGGAIN0-2) is increased.
  [NAVI] : Muting of ONSEIMUTE signal is switched between ON and OFF by a toggle switch.
  [↓] : Move on to the next inspection.

5. Data Communication (Short Circuit) check (Not for service)



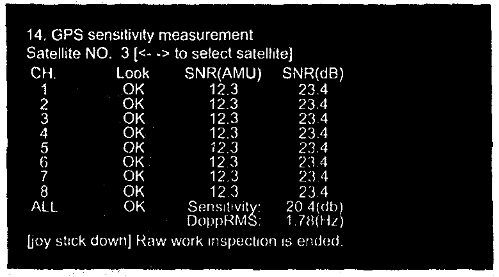
5. Data Communication (Short Circuit) check

Serial I/O #5(for Extension) OK
Serial I/O #7(for Debug) OK

[joy stick down] It progresses to the next inspection.

- SIO connection short is checked.
- Loop back check is performed on 5CH and 7CH.
- Wait screen is displayed until the checking is completed.
- When [RETURN] key on the remote controller is pressed while the inspection result is being displayed on the screen, inspection will be performed once again.
- Only in the case of OK, you can move on to the next inspection by the [↓] key on the remote controller.

14. GPS sensitivity measurement



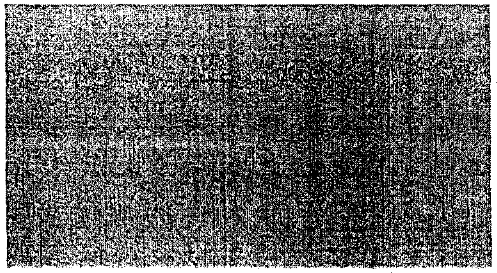
```
14. GPS sensitivity measurement
Satellite NO.  3 [<- -> to select satellite]
 CH.          Look      SNR(AMU)   SNR(dB)
  1            OK         12.3       23.4
  2            OK         12.3       23.4
  3            OK         12.3       23.4
  4            OK         12.3       23.4
  5            OK         12.3       23.4
  6            OK         12.3       23.4
  7            OK         12.3       23.4
  8            OK         12.3       23.4
 ALL           OK      Sensitivity:  20 4(db)
                       DoppRMS:      1.78(Hz)
[joy stick down] Raw work inspection is ended.
```

- GPS can be changed by the [←] and [→] keys on the remote controller.
- Sensitivity of the selected GPS is displayed by the [RETURN] key on the remote controller.
- Production engineering inspection is ended and service menu is displayed by the [↓] key on the remote controller.

<Supplemental explanation regarding error display>

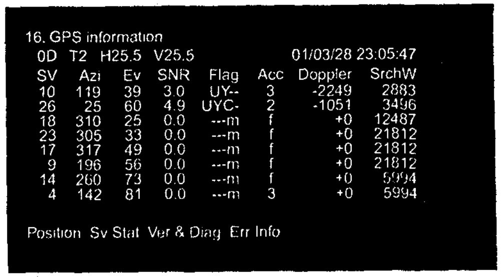
Displayed message	Details of the error
No connection to DRAGON	This is an error when communication with DRAGON is not established. Communication error due to a hardware problem could be the cause. It is highly possible that the hardware on the DRAGON side is defective.
Command error	Time out error for response to BIOS call. Communication error due to a hardware problem could be the cause. It is highly possible that the hardware on the DRAGON side is defective.

15. Picture RGB check



- RGB bridge is inspected.
- The screen can be switched by the [←] and [→] keys on the remote controller.
- RGB is drawn in the pattern of R 100% → R 50% → G 100% → G 50% → B 100% → B 50%.
- Total of 6 screens will be displayed.

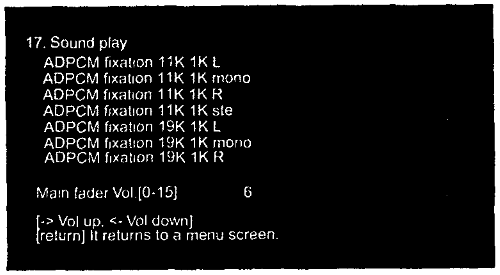
16. GPS information



```
16. GPS information
 0D  T2  H25.5  V25.5              01/03/28 23:05:47
 SV   Azi   Ev   SNR   Flag   Acc  Doppler   SrchW
 10   119   39   3.0   UY--    3    -2249     2883
 26    25   60   4.9   UYC-    2    -1051     3496
 18   310   25   0.0   ---m    f       +0    12487
 23   305   33   0.0   ---m    f       +0    21812
 17   317   49   0.0   ---m    f       +0    21812
  9   196   56   0.0   ---m    f       +0    21812
 14   260   73   0.0   ---m    f       +0     5994
  4   142   81   0.0   ---m    3       +0     5994

Position  Sv Stat  Ver & Diag  Err Info
```

- "Position information" will be displayed when the cursor is at the "Position" position and the [CR] key is pressed on the remote controller.
- "Status information" will be displayed when the cursor is at the "Sv Stat" position and the [CR] key is pressed on the remote controller.
- "Diagnosis information" will be displayed when the cursor is at the "Ver&Diag" position and the [CR] key is pressed on the remote controller.
- "Error information" will be displayed when the cursor is at the "Err Info" position and the [CR] key is pressed on the remote controller.
- When an inspection is performed, "status information" (the screen shown above) will be displayed first.

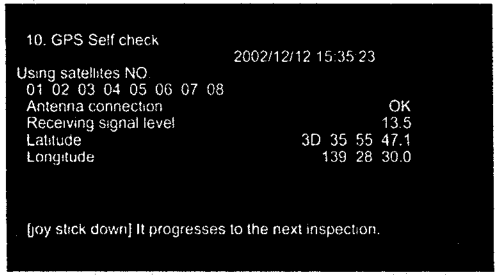
17. Sound play



```
17. Sound play
   ADPCM fixation 11K 1K L
   ADPCM fixation 11K 1K mono
   ADPCM fixation 11K 1K R
   ADPCM fixation 11K 1K ste
   ADPCM fixation 19K 1K L
   ADPCM fixation 19K 1K mono
   ADPCM fixation 19K 1K R

 Main fader Vol.[0-15]          6

 [-> Vol up, <- Vol down]
 [return] It returns to a menu screen.
```

- Voice file (WAVE format) will be played back.
- The voice selected by the [CR] key on the remote controller will be played back.
- Volume level can be changed by the [←] and [→] keys on the remote controller.

10. GPS Self check



```
10. GPS Self check
                                 2002/12/12 15:35:23
Using satellites NO.
 01 02 03 04 05 06 07 08
 Antenna connection                                OK
 Receiving signal level                          13.5
 Latitude                             3D 35 55  47.1
 Longitude                               139 28  30.0


 [joy stick down] It progresses to the next inspection.
```

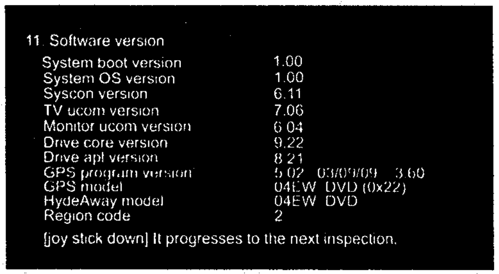
- GPS receiving status will be displayed.
- Conditions to move on to the next inspection.
  Antenna connection is OK.
  Data is received from one or more satellite.
  Time is being displayed.
- When all the conditions are met, the background color will change to blue.
- Only when all the conditions are met, you can move on to the next inspection by the [↓] key on the remote controller.

It should be noted, however, that you will not be able to move on to the next inspection if there is an error (background color is red) even if the conditions are met.

<Supplemental explanation regarding error display>

Displayed message	Details of the error
No connection to DRAGON	This is an error when communication with DRAGON is not established. Communication error due to a hardware problem could be the cause. It is highly possible that the hardware on the DRAGON side is defective.
Command error	Time out error for response to BIOS call. Communication error due to a hardware problem could be the cause. It is highly possible that the hardware on the DRAGON side is defective.
Invalid data	This is an error when request is made while the data for response is not prepared (not obtained from DRAGON). Communication error due to a hardware problem could be the cause. It is highly possible that the hardware on the DRAGON side is defective.

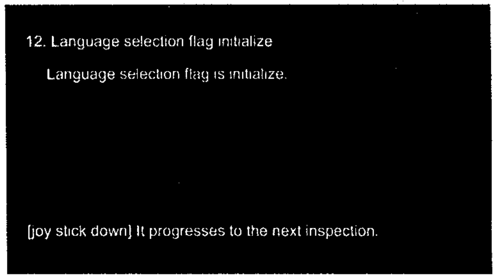
11. Software version



```
11. Software version
  System boot version          1.00
  System OS version            1.00
  Syscon version               6.11
  TV ucom version              7.06
  Monitor ucom version         6.04
  Drive core version           9.22
  Drive apl version            8.21
  GPS program version          5.02  03/09/09  3.60
  GPS model                    04EW  DVD (0x22)
  HydeAway model               04EW  DVD
  Region code                  2
  [joy stick down] It progresses to the next inspection.
```

- It indicates the version information of the software.
- As for the "GPS model", it will be considered OK if either "04EW DVD" or "04UC DVD" is displayed.
- As for the "Hide away model", it will be considered OK if either "04EW DVD" or "04UC DVD" is displayed.
- As for the region code, it will be considered OK if "2" is displayed in the case of EW model and if "1" is displayed for UC model.
- When "GPS model", "Hide away model" and "region code" are all OK, you can move on to the next inspection by the [↓] key on the remote controller.

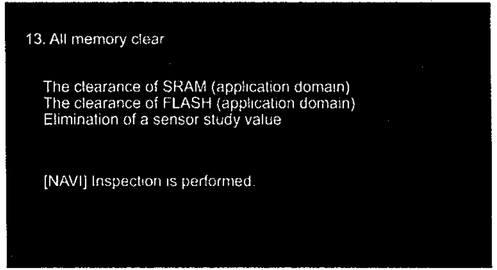
12. Language selection flag initialize



```
12. Language selection flag initialize

    Language selection flag is initialize.






[joy stick down] It progresses to the next inspection.
```

- When the system enters into this inspection, language selection will be set to the original setting made at the time of shipment (i.e. no setting).
  * The setting is made to display the screen for selecting the language to be used at the initial boot up after the shipment out of the factory.
- The setting is made when the system enters into this inspection.
- You can move on to the next inspection by the [↓] key on the remote controller.

13. All memory clear (Not for service)



```
13. All memory clear

    The clearance of SRAM (application domain)
    The clearance of FLASH (application domain)
    Elimination of a sensor study value


    [NAVI] Inspection is performed.
```

- SRAM (application domain) is cleared.
- FLASH (application domain) is cleared.
- Sensor learning level is cleared.
- If SRAM clear is not successful, FLASH will not be cleared.
- After the inspection screen is displayed, the above process is executed by the [NAVI] key on the remote controller.
- The result of the process is displayed.
- Only when everything is OK, you can move on to the next inspection by the [↓] key on the remote controller.

7. GENERAL INFORMATION

7.1 DIAGNOSIS

7.1.1 DISASSEMBLY

- **Removing the Grille Assy (Fig.1)**

1 Remove the two screws and then remove the Holder.
Disconnect the connector.

2 Remove the two screws and then remove the Grille Assy.

- **Removing the Case**

3 Remove the five screws.(Fig.1)

4 Remove the screw and then remove the Case.(Fig.1)

Note) Inside the product there is a flexible substrate that connects the Case and the Bracket.
Be very careful and do not give it a strong pull when removing the Case, otherwise it may be torn.

5 Remove the four screws. (Fig.2)

Disconnect the connector and then remove the Bracket. (Fig.2)
Remove the Case.(Fig.1)

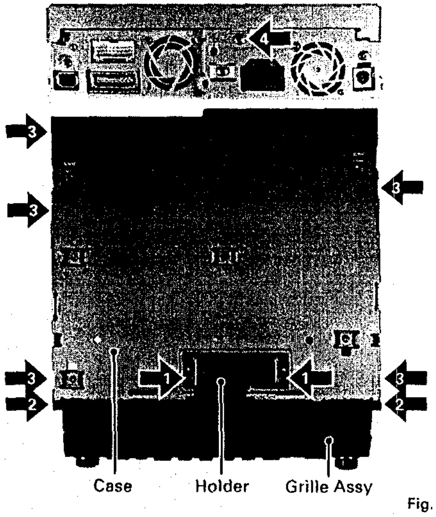


Fig.1

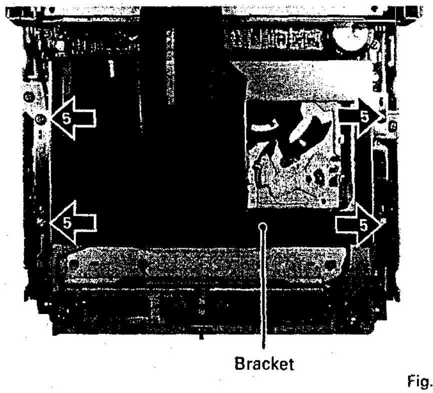


Fig.2

- **Removing the DVD Mechanism Module (Fig.3)**

1 Remove the four screws.

Disconnect the connector and then remove the DVD Mechanism Module.

- **Removing the Relay PCB (Fig.3)**

2 Straighten the tab at location indicated.

3 Remove the two screws.

Disconnect the connector and then remove the Relay PCB.

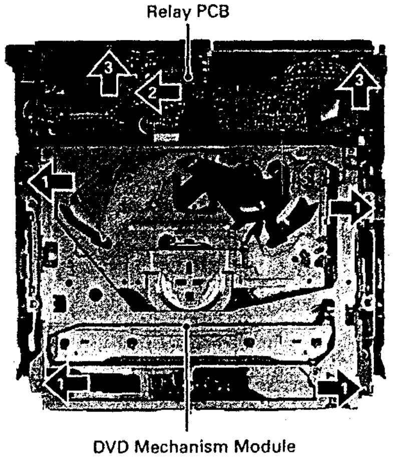


Fig.3

- **Removing the CC Unit (Fig.4)**

1 Remove the screw.

2 Remove the three screws and then remove the Bracket.

3 Remove the six screws and then remove the CC Unit.

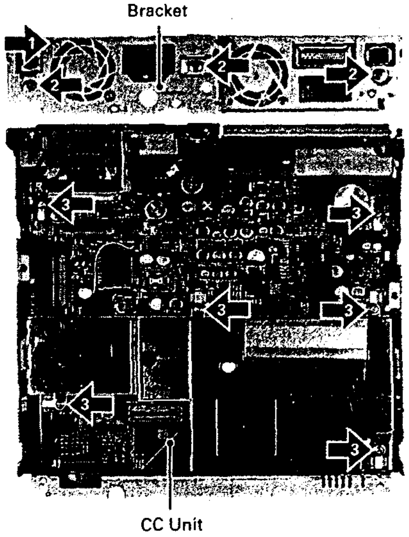
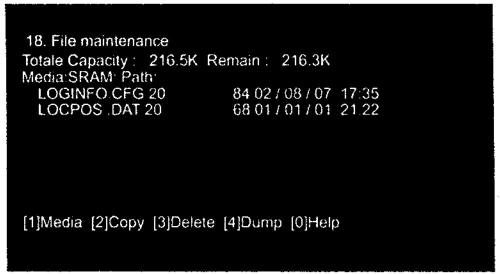


Fig.4

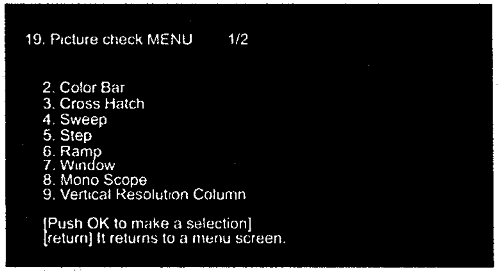
18. File maintenance



```
18. File maintenance
Totale Capacity :   216.5K  Remain :   216.3K
Media:SRAM: Path:
   LOGINFO.CFG 20            84 02 / 08 / 07  17:35
   LOCPOS .DAT 20            68 01 / 01 / 01  21.22



[1]Media  [2]Copy  [3]Delete  [4]Dump  [0]Help
```

- File can be copied, deleted or dumped.
  Refer to HELP for "how to use" each function.

19. Picture check MENU

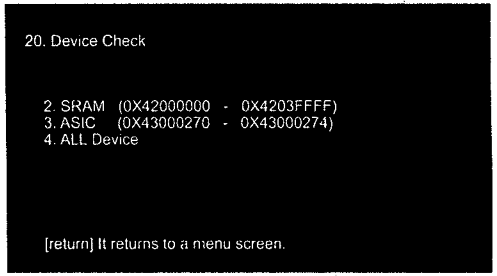


```
19. Picture check MENU       1/2

   2. Color Bar
   3. Cross Hatch
   4. Sweep
   5. Step
   6. Ramp
   7. Window
   8. Mono Scope
   9. Vertical Resolution Column

   [Push OK to make a selection]
   [return] It returns to a menu screen.
```

A pattern is selected by the [↑] and [↓] keys and an image is displayed by the [CR] key.

1. Plain
   ...Display is made in the order of black, blue, red, pink, green, light blue, yellow and white by the [←] and [→] keys operation on the remote controller.
2. Color bar
   ...White, yellow, light blue, green, pink, red, blue, black bars will be displayed from left to right.
3. Cross hatch
4. Sweep
5. Step
6. Lamp
7. Window
8. Mono scope
9. Cycle line 1
10. Cycle line 2
11. Horizontal stripe 1
12. Horizontal stripe 2
13. Chinese character pattern
14. Map (map.jpg)
15. Natural image (nature.jpg)
16. Portrait 1 (hito1.jpg)
17. Portrait 2 (hito2.jpg)

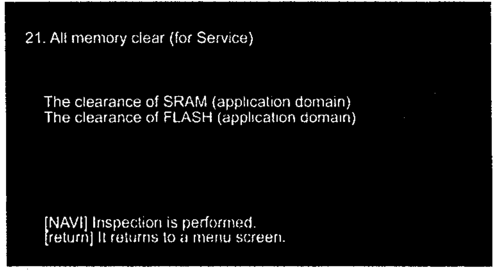
20. Device Check



```
20. Device Check


   2. SRAM   (0X42000000  -  0X4203FFFF)
   3. ASIC   (0X43000270  -  0X43000274)
   4. ALL Device



   [return] It returns to a menu screen.
```

- The above devices will be inspected for engineering purpose.
- A device is selected by the [↑] and [↓] keys on the remote controller, and cleared by the [CR] key.
- On each device screen, a pattern is selected by the [↑] and [↓] keys on the remote controller, and inspection is started by the [CR] key on the remote controller.

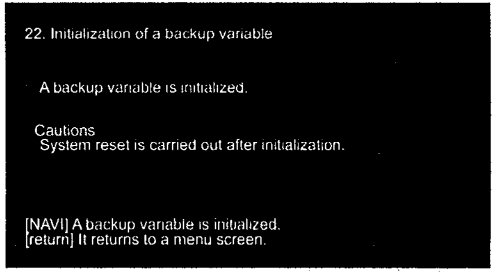
21. All memory clear (for Service)



```
21. All memory clear (for Service)


   The clearance of SRAM (application domain)
   The clearance of FLASH (application domain)



   [NAVI] Inspection is performed.
   [return] It returns to a menu screen.
```

- SRAM (application domain) is cleared.
- FLASH (application domain) is cleared.
- If SRAM clear is not successful, FLASH will not be cleared.
- After the inspection screen is displayed, the above process is executed by the [NAVI] key on the remote controller.
- The result of the process is displayed.

22. Initialization of a backup variable



```
22. Initialization of a backup variable

   A backup variable is initialized.

  Cautions
   System reset is carried out after initialization.



[NAVI] A backup variable is initialized.
[return] It returns to a menu screen.
```

- Back up variables are initialized by the [NAVI] key on the remote controller for system reset.
- The screen will return to the menu screen by the [RETURN] key on the remote controller.

● Removing the Case (Fig.10)

1 Remove the nine screws and then remove the Case.

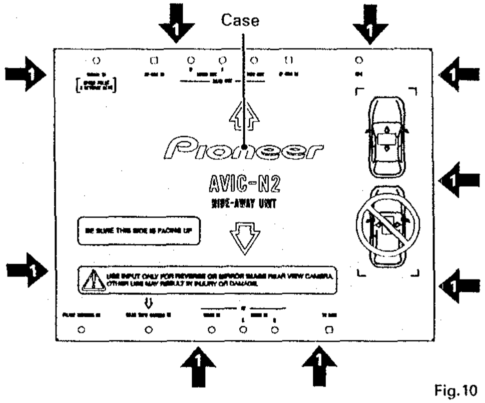

Case
1
Pioneer
AVIC-N2
HIDE-AWAY UNIT

Fig.10

● Removing the Mother Tuner Unit (Fig.11)

1 Remove the four screws.

Disconnect the connector and then remove the Mother Tuner Unit.

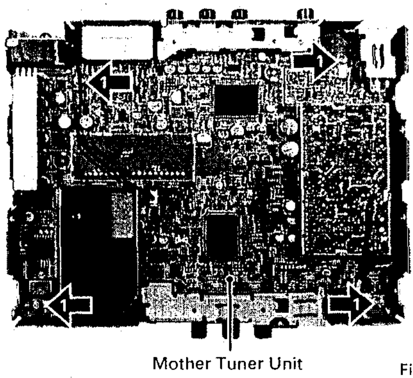
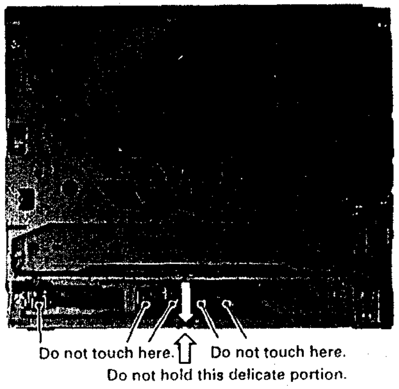

1
Mother Tuner Unit

Fig.11

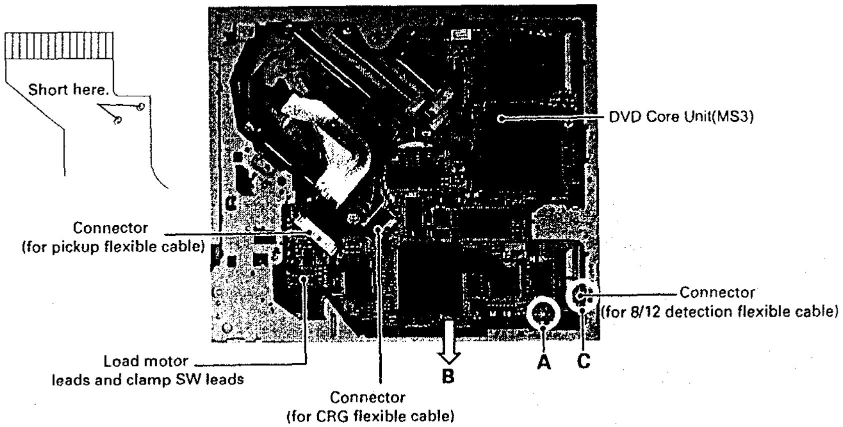
● Precautions on handling the mechanism module

1. Hold the upper and main frames.
2. Do not hold the front portion of the upper frame. It is a delicate part.
3. Do not touch the switches on the top panel.
4. Be careful not to catch the flexible cables.


Do not touch here.
Do not touch here.
Do not hold this delicate portion.

● Removing the DVD Core Unit(MS3)

1. Set the mechanism to the lock position (disc load standby position).
2. Place the mechanism module upside down.
3. Short the two lands on the pickup flexible cable as shown below.
4. Be sure to disconnect the pickup flexible cable and the CRG flexible cable from the connectors to protect them from damages.
5. Remove solder from the load motor leads and clamp SW leads.
6. Loosen the two fixing screws. Lift the position A of the DVD Core Unit lightly and move it in the direction B to remove it. Be careful not to damage the flexible cable C.
7. Disconnect the 8/12 detection flexible-cable from the connector.


Short here.
DVD Core Unit(MS3)
Connector
(for pickup flexible cable)
Connector
(for 8/12 detection flexible cable)
Load motor
leads and clamp SW leads
B
A
C
Connector
(for CRG flexible cable)

● Removing the Case (Fig.5)

1. Remove the two screws and then remove the Holder.
2. Remove the screw.
3. Remove the five screws and then remove the Case.

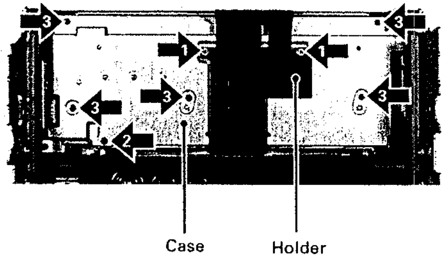

3
3
1
1
3
3
3
2
Case
Holder

Fig.5

● Removing the Display Assy (Fig.6)

1. Remove the screw.

Disconnect the connector and then remove the Motor Unit.

2. Remove the two screws and then remove the two Holders.
3. Pull out the Display Assy in the arrow indicated direction.

Note) When reassembling, hold the switch down with tweezers or the like and put the Display Assy back to the Chassis. Otherwise, the switch may be damaged and not function properly.

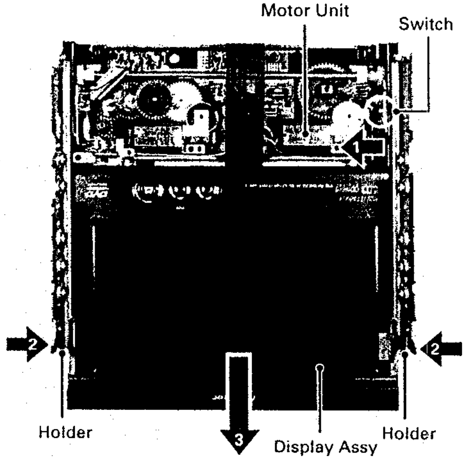

Motor Unit
Switch
1
2
2
Holder
3
Display Assy
Holder

Fig.6

● Removing the Main Unit (Fig.7)

1. Remove the screw and then remove the Bracket.
2. Remove the four screws and then remove the Shaft Unit.
3. Remove the three screws.

Disconnect the connector and then remove the Main Unit.

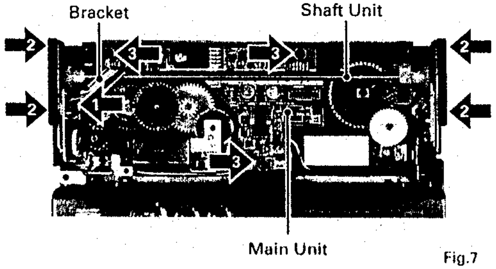

Bracket
Shaft Unit
2
3
3
2
2
1
2
3
Main Unit

Fig.7

● Removing the Display Assy (Fig.8)

1. Remove the two screws and then remove the Holder.
2. Remove the three screws and then remove the Cover Unit.
3. Remove the four screws.

Disconnect the connector and then remove the Display Assy.

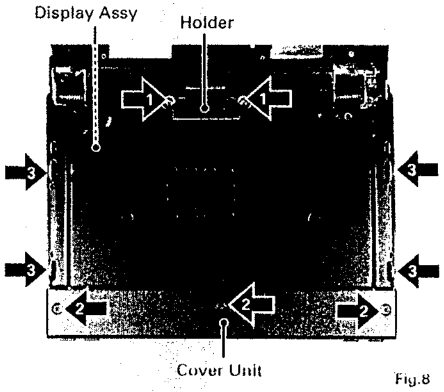

Display Assy
Holder
1
1
3
3
3
3
2
2
2
Cover Unit

Fig.8

● Removing the Monitor PCB (Fig.9)

1. Straighten the tabs at two locations indicated.
2. Remove the screw.

Disconnect the connector and then remove the Monitor PCB.

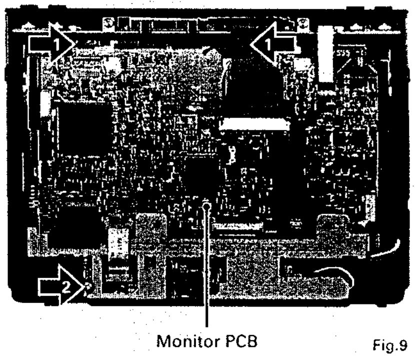
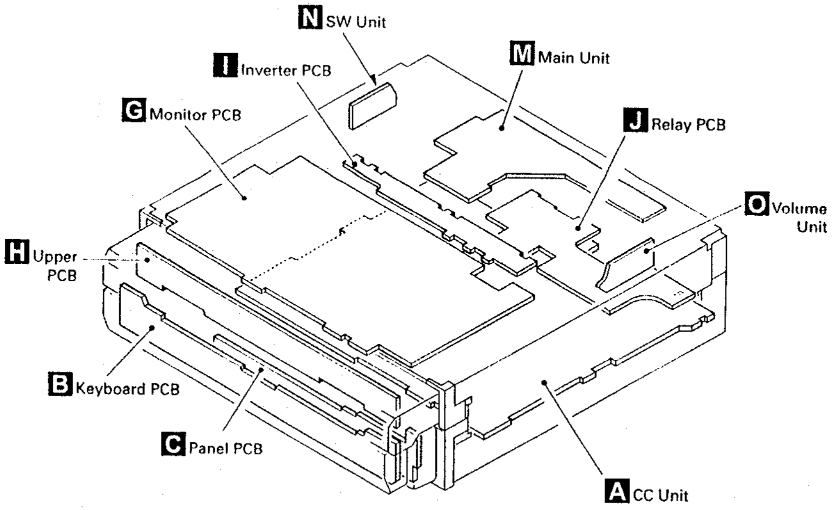
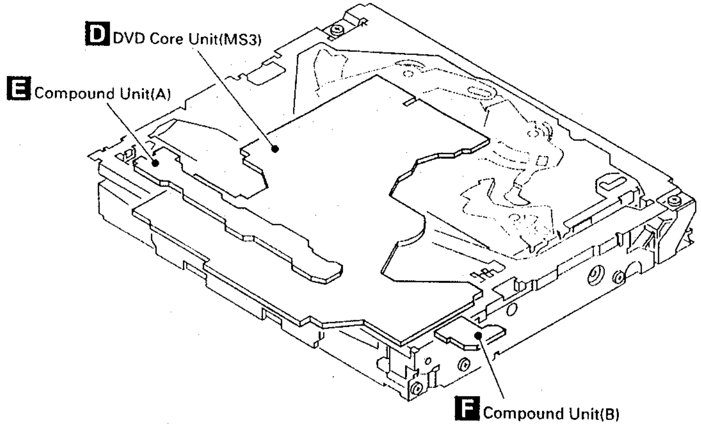

1
1
2
Monitor PCB

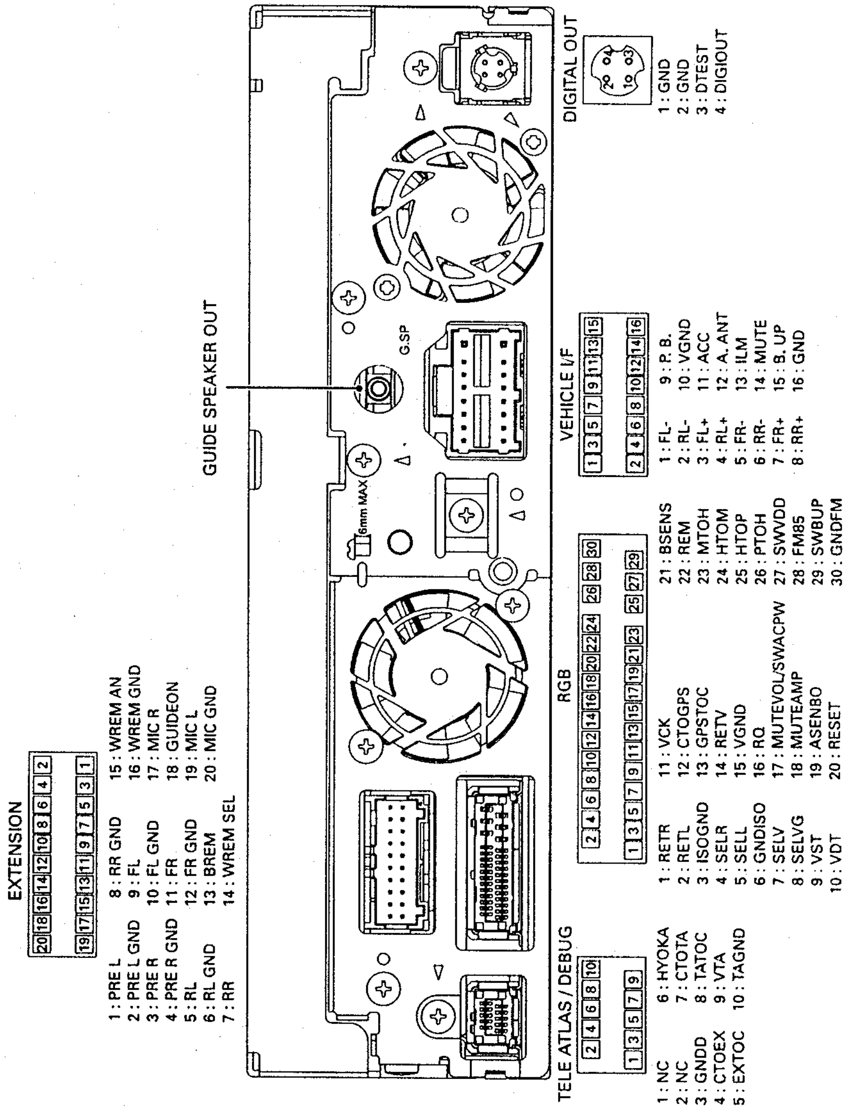
Fig.9

7.1.2 PCB LOCATIONS


N SW Unit
I Inverter PCB
M Main Unit
G Monitor PCB
J Relay PCB
O Volume Unit
H Upper PCB
B Keyboard PCB
C Panel PCB
A CC Unit


D DVD Core Unit(MS3)
E Compound Unit(A)
F Compound Unit(B)

7.1.3 CONNECTOR FUNCTION DESCRIPTION


GUIDE SPEAKER OUT
G.SP
6mm MAX
DIGITAL OUT
VEHICLE I/F
RGB
TELE ATLAS / DEBUG
EXTENSION
20 18 16 14 12 10 8 6 4 2
19 17 15 13 11 9 7 5 3 1

EXTENSION

1 : PRE L
2 : PRE L GND
3 : PRE R
4 : PRE R GND
5 : RL
6 : RL GND
7 : RR
8 : RR GND
9 : FL
10 : FL GND
11 : FR
12 : FR GND
13 : BREM
14 : WREM SEL
15 : WREM AN
16 : WREM GND
17 : MIC R
18 : GUIDEON
19 : MIC L
20 : MIC GND

TELE ATLAS / DEBUG

1 : NC
2 : NC
3 : GNDD
4 : CTOEX
5 : EXTOC
6 : HYOKA
7 : CTOTA
8 : TATOC
9 : VTA
10 : TAGND

RGB

1 : RETR
2 : RETL
3 : ISOGND
4 : SELR
5 : SELL
6 : GNDISO
7 : SELV
8 : SELVG
9 : VST
10 : VDT
11 : VCK
12 : CTOGPS
13 : GPSTOC
14 : RETV
15 : VGND
16 : RQ
17 : MUTEVOL/SWACPW
18 : MUTEAMP
19 : ASENBO
20 : RESET
21 : BSENS
22 : REM
23 : MTOH
24 : HTOM
25 : HTOP
26 : PTOH
27 : SWVDD
28 : FM85
29 : SWBUP
30 : GNDFM

VEHICLE I/F

1 : FL-
2 : RL-
3 : FL+
4 : RL+
5 : FR-
6 : RR-
7 : FR+
8 : RR+
9 : P. B.
10 : VGND
11 : ACC
12 : A. ANT
13 : ILM
14 : MUTE
15 : B. UP
16 : GND

DIGITAL OUT

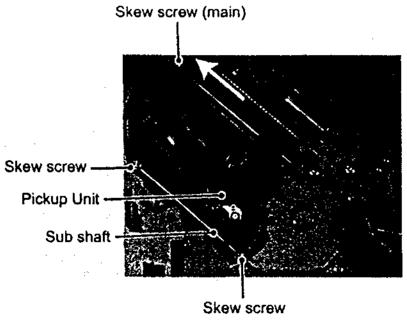
1 : GND
2 : GND
3 : DTEST
4 : DIGIOUT

● Removing the Pickup Unit

1. Remove the module pc board in accordance with the procedure of "Removing the module pc board."
2. While holding the pickup case, remove the Skew screw (main).
3. Lifting the end of the pickup rack, slide the main shaft, and remove the Pickup Unit.

Notes:

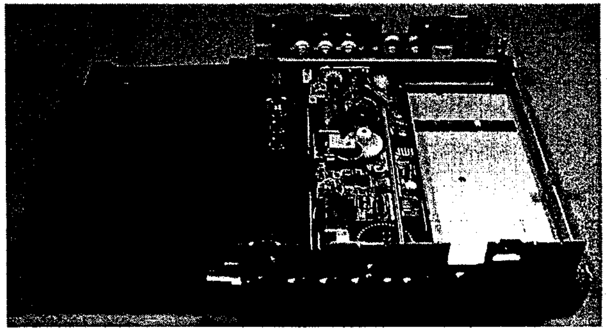
Replacing the pickup unit requires the skew adjustment.
Remove glue from both ends of the main and sub shafts, and skew stud.
Do not reuse the old skew screw. Be sure to use a brand-new skew screw supplied with a new Pickup Unit.
Fix the skew screw with Screw lock (GYL1001) after adjustment.



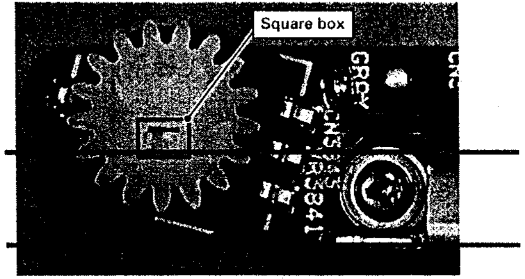
● How to Install the Volume Unit fo the Drive Unit

When install the Volume Unit, adjust the positioning of the rotating angle of the gear.

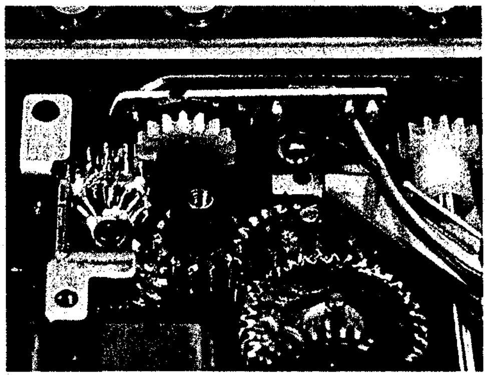
1. Set the Monitor Unit horizontally with the Main Unit of the Drive Unit.

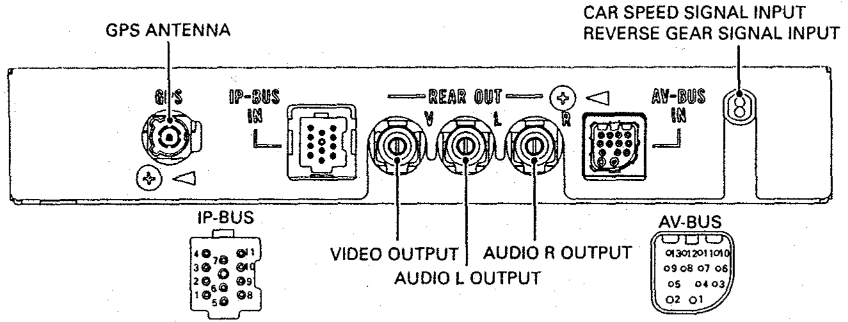


2. When install the gear unit, rotate the gear by hand until the square box of the gear keeps in a horizontal position like the figure below.



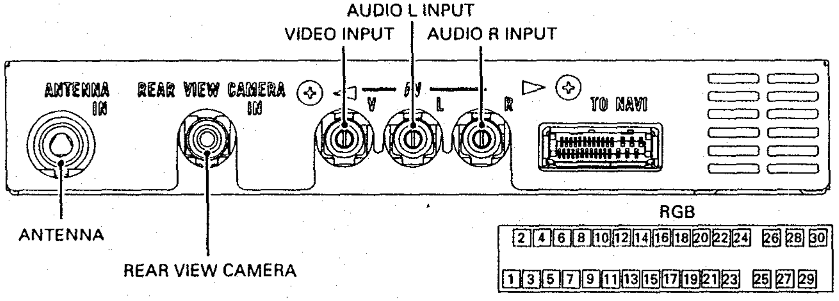
*Gap of one teeth is acceptable.




GPS ANTENNA
CAR SPEED SIGNAL INPUT
REVERSE GEAR SIGNAL INPUT
GPS
IP-BUS IN
REAR OUT
V
L
R
AV-BUS IN
IP-BUS
VIDEO OUTPUT
AUDIO L OUTPUT
AUDIO R OUTPUT
AV-BUS

1. BUS+
2. BUSG
3. LG
4. NC
5. BUS-
6. BUSC
7. BUSL
8. ASENB
9. BUSR
10. BUSRG
11. BUSLG

1. VIDEO GND
2. COMP VIDEO
3. NC
4. IP-SEL1
5. IP-SEL2
6. LED-V
7. GND
8. BEEP MUTE
9. BEEP-
10. REMOUT
11. NEW AV SENS
12. AV ON
13. BEEP+


AUDIO L INPUT
VIDEO INPUT
AUDIO R INPUT
ANTENNA IN
REAR VIEW CAMERA IN
AV
V
L
R
TO NAVI
ANTENNA
REAR VIEW CAMERA
RGB

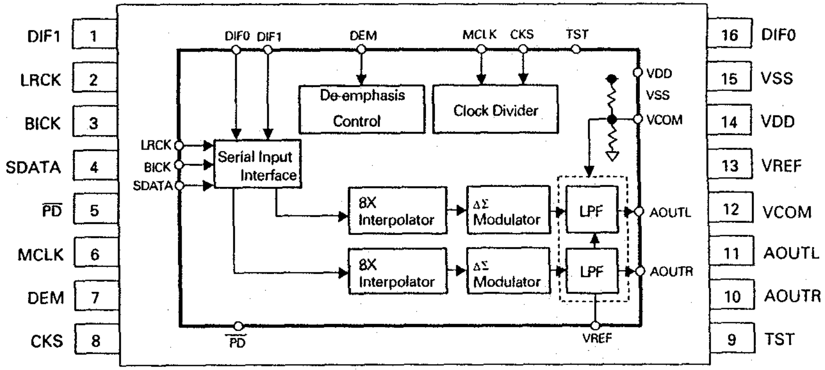
1 : RETR
2 : RETL
3 : ISOGND
4 : SELR
5 : SELL
6 : GNDISO
7 : SELV
8 : SELVG
9 : VST
10 : VDT
11 : VCK
12 : CTOGPS
13 : GPSTOC
14 : RETV
15 : VGND
16 : RQ
17 : MUTEVOL/SWACPW
18 : MUTEAMP
19 : ASENBO
20 : RESET
21 : BSENS
22 : REM
23 : MTOH
24 : HTOM
25 : HTOP
26 : PTOH
27 : SWVDD
28 : FM85
29 : SWBUP
30 : GNDFM

7.2 PARTS

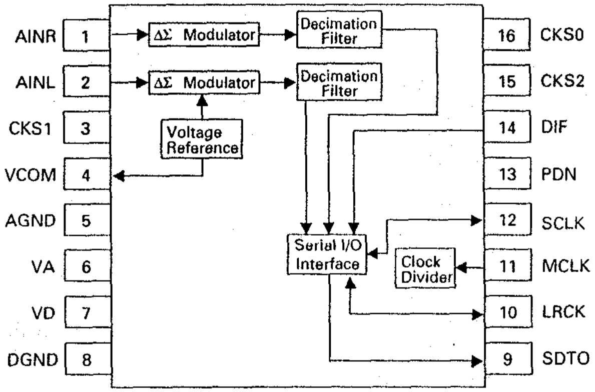
7.2.1 IC

AK4351VT
AK5381VT
HY57V561620CLT-H
K4S561632E-TL75
PEH005A(UC model)
PEH003A(EW model)
PEH006A(UC model)
PEH004A(EW model)
MB86291APFVS-G-DL
S-L2980A33MC-C6S
NJM2561F1
PD6336C
PD5937A
PD3390A
LC72720YVS(EW model)
SBX3050-01
PD6473A(UC model)
PD6472A(EW model)
PD6340A
PE5413B
S-80835CNNB-B8U
SI6544DQ
TK15404AMI
S-93C46BR0I-J8T1
R1224N102H
HA12240FP
S-L2980A50MC-C7J
S-812C33AMC-C2N
PE5412B(UC model)
PE5411B(EW model)

AK4351VT

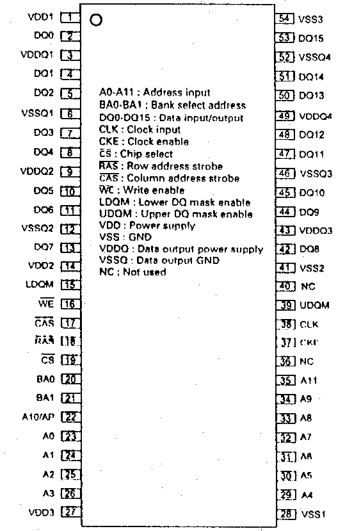

DIF1 1
LRCK 2
BICK 3
SDATA 4
PD 5
MCLK 6
DEM 7
CKS 8
16 DIF0
15 VSS
14 VDD
13 VREF
12 VCOM
11 AOUTL
10 AOUTR
9 TST
DIF0
DIF1
DEM
MCLK
CKS
TST
De-emphasis Control
Clock Divider
VDD
VSS
VCOM
LRCK
BICK
SDATA
Serial Input Interface
8X Interpolator
ΔΣ Modulator
LPF
AOUTL
AOUTR
PD
VREF

AK5381VT

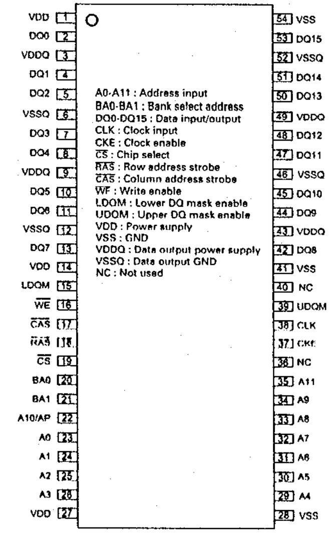

AINR 1
AINL 2
CKS1 3
VCOM 4
AGND 5
VA 6
VD 7
DGND 8
16 CKS0
15 CKS2
14 DIF
13 PDN
12 SCLK
11 MCLK
10 LRCK
9 SDTO
ΔΣ Modulator
Decimation Filter
Voltage Reference
Serial I/O Interface
Clock Divider

IC's marked by * are MOS type.
Be careful in handling them because they are
very liable to be damaged by electrostatic induction.

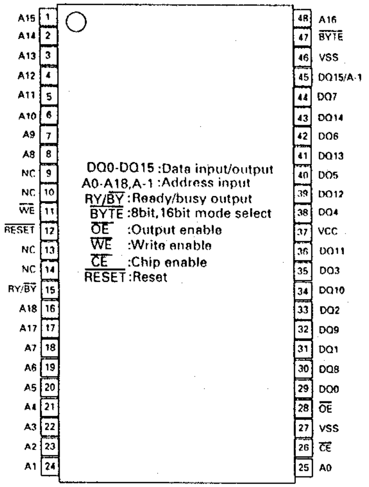
* HY57V561620CLT-H


VDD1 1
DQ0 2
VDDQ1 3
DQ1 4
DQ2 5
VSSQ1 6
DQ3 7
DQ4 8
VDDQ2 9
DQ5 10
DQ6 11
VSSQ2 12
DQ7 13
VDD2 14
LDQM 15
WE 16
CAS 17
RAS 18
CS 19
BA0 20
BA1 21
A10/AP 22
A0 23
A1 24
A2 25
A3 26
VDD3 27
54 VSS3
53 DQ15
52 VSSQ4
51 DQ14
50 DQ13
49 VDDQ4
48 DQ12
47 DQ11
46 VSSQ3
45 DQ10
44 DQ9
43 VDDQ3
42 DQ8
41 VSS2
40 NC
39 UDQM
38 CLK
37 CKE
36 NC
35 A11
34 A9
33 A8
32 A7
31 A6
30 A5
29 A4
28 VSS1
A0-A11 : Address input
BA0-BA1 : Bank select address
DQ0-DQ15 : Data input/output
CLK : Clock input
CKE : Clock enable
CS : Chip select
RAS : Row address strobe
CAS : Column address strobe
WE : Write enable
LDQM : Lower DQ mask enable
UDQM : Upper DQ mask enable
VDD : Power supply
VSS : GND
VDDQ : Data output power supply
VSSQ : Data output GND
NC : Not used

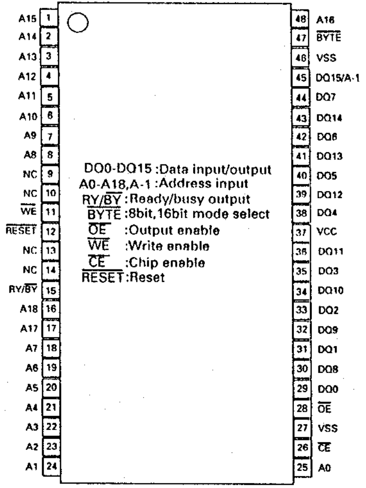
* K4S561632E-TL75


VDD 1
DQ0 2
VDDQ 3
DQ1 4
DQ2 5
VSSQ 6
DQ3 7
DQ4 8
VDDQ 9
DQ5 10
DQ6 11
VSSQ 12
DQ7 13
VDD 14
LDQM 15
WE 16
CAS 17
RAS 18
CS 19
BA0 20
BA1 21
A10/AP 22
A0 23
A1 24
A2 25
A3 26
VDD 27
54 VSS
53 DQ15
52 VSSQ
51 DQ14
50 DQ13
49 VDDQ
48 DQ12
47 DQ11
46 VSSQ
45 DQ10
44 DQ9
43 VDDQ
42 DQ8
41 VSS
40 NC
39 UDQM
38 CLK
37 CKE
36 NC
35 A11
34 A9
33 A8
32 A7
31 A6
30 A5
29 A4
28 VSS
A0-A11 : Address input
BA0-BA1 : Bank select address
DQ0-DQ15 : Data input/output
CLK : Clock input
CKE : Clock enable
CS : Chip select
RAS : Row address strobe
CAS : Column address strobe
WE : Write enable
LDQM : Lower DQ mask enable
UDQM : Upper DQ mask enable
VDD : Power supply
VSS : GND
VDDQ : Data output power supply
VSSQ : Data output GND
NC : Not used

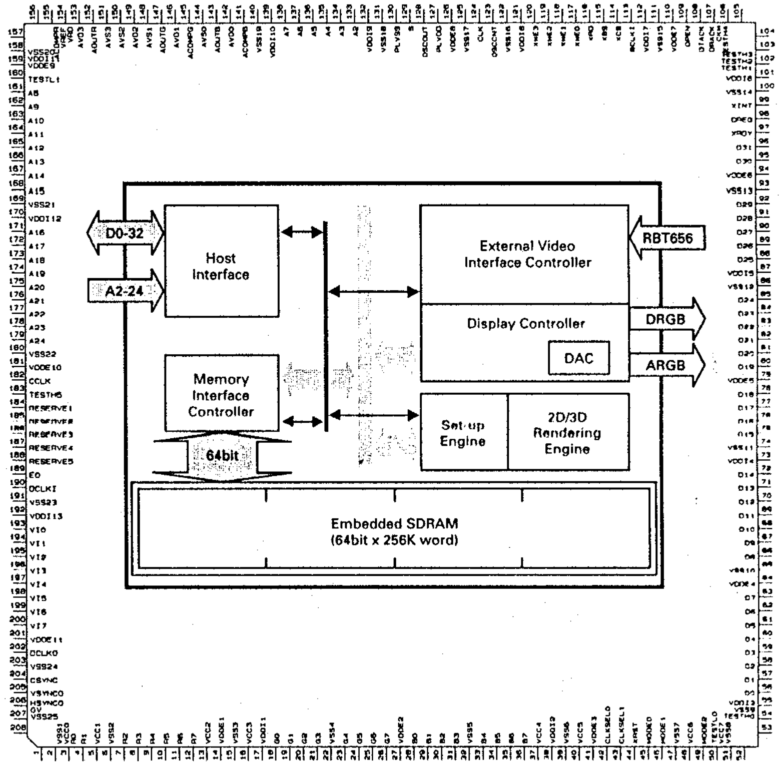
* PEH005A(UC model)
* PEH003A(EW model)


A15 1
A14 2
A13 3
A12 4
A11 5
A10 6
A9 7
A8 8
NC 9
NC 10
WE 11
RESET 12
NC 13
NC 14
RY/BY 15
A18 16
A17 17
A7 18
A6 19
A5 20
A4 21
A3 22
A2 23
A1 24
48 A16
47 BYTE
46 VSS
45 DQ15/A-1
44 DQ7
43 DQ14
42 DQ6
41 DQ13
40 DQ5
39 DQ12
38 DQ4
37 VCC
36 DQ11
35 DQ3
34 DQ10
33 DQ2
32 DQ9
31 DQ1
30 DQ8
29 DQ0
28 OE
27 VSS
26 CE
25 A0
DQ0-DQ15 :Data input/output
A0-A18,A-1 :Address input
RY/BY :Ready/busy output
BYTE :8bit,16bit mode select
OE :Output enable
WE :Write enable
CE :Chip enable
RESET :Reset

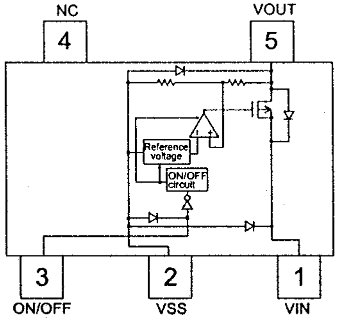
* PEH006A(UC model)
* PEH004A(EW model)


A15 1
A14 2
A13 3
A12 4
A11 5
A10 6
A9 7
A8 8
NC 9
NC 10
WE 11
RESET 12
NC 13
NC 14
RY/BY 15
A18 16
A17 17
A7 18
A6 19
A5 20
A4 21
A3 22
A2 23
A1 24
48 A16
47 BYTE
46 VSS
45 DQ15/A-1
44 DQ7
43 DQ14
42 DQ6
41 DQ13
40 DQ5
39 DQ12
38 DQ4
37 VCC
36 DQ11
35 DQ3
34 DQ10
33 DQ2
32 DQ9
31 DQ1
30 DQ8
29 DQ0
28 OE
27 VSS
26 CE
25 A0
DQ0-DQ15 :Data input/output
A0-A18,A-1 :Address input
RY/BY :Ready/busy output
BYTE :8bit,16bit mode select
OE :Output enable
WE :Write enable
CE :Chip enable
RESET :Reset

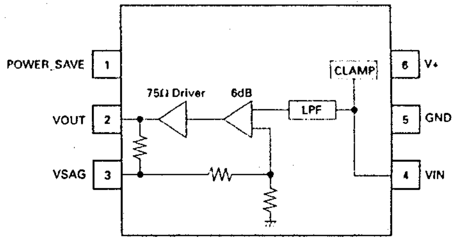
* MB86291APFVS-G-DL


D0-32
A2-24
Host Interface
External Video Interface Controller
RBT656
Display Controller
DAC
DRGB
ARGB
Memory Interface Controller
64bit
Set-up Engine
2D/3D Rendering Engine
Embedded SDRAM
(64bit x 256K word)

* S-L2980A33MC-C6S

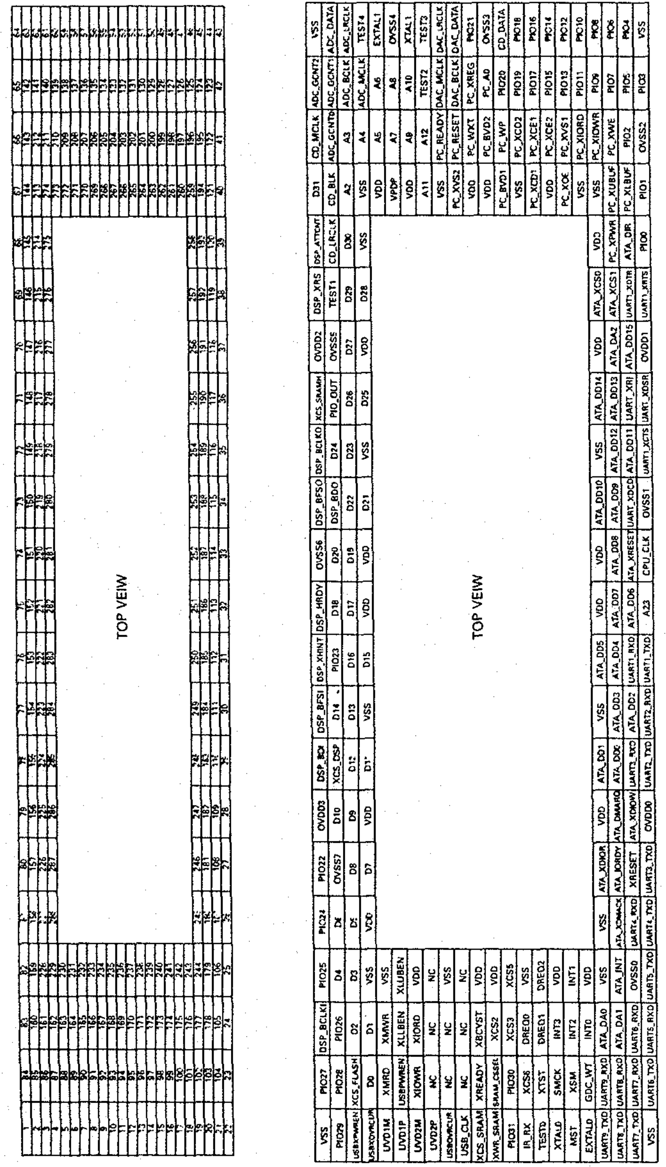

NC
4
VOUT
5
Reference voltage
ON/OFF circuit
3
ON/OFF
2
VSS
1
VIN

NJM2561F1

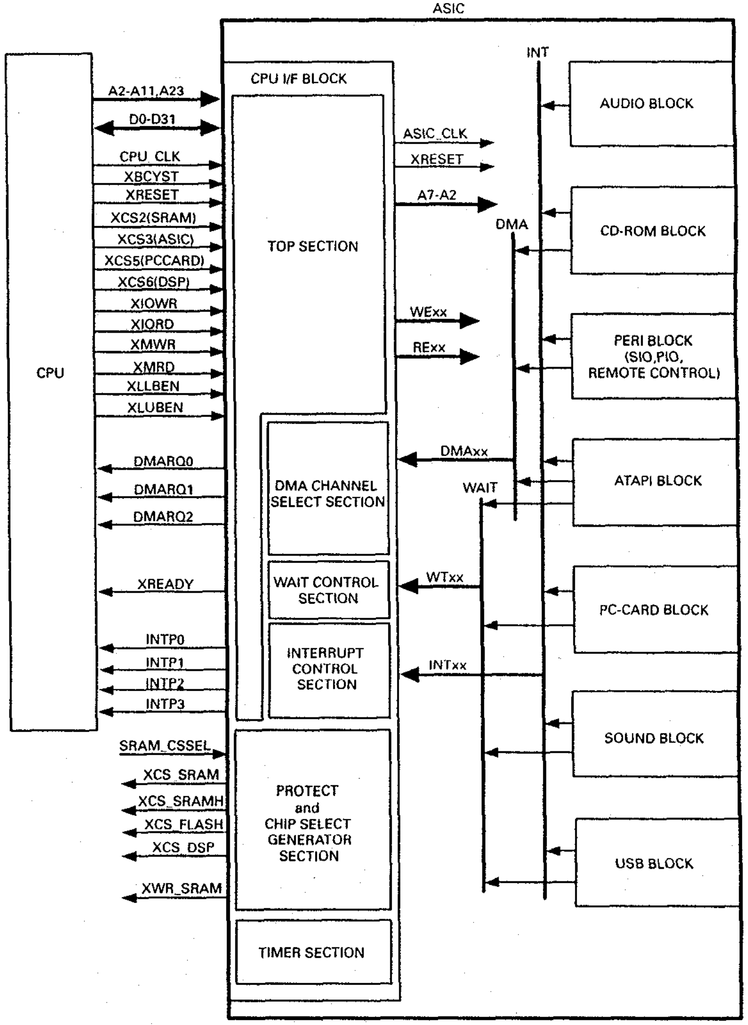

POWER SAVE
1
VOUT
2
VSAG
3
75Ω Driver
6dB
LPF
CLAMP
6
V+
5
GND
4
VIN

* PD6336C

● Pin Arrangement Chart


TOP VEIW
TOP VEIW

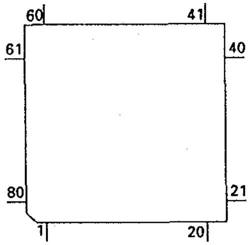
● Block Diagram Chart


ASIC
CPU
CPU I/F BLOCK
TOP SECTION
DMA CHANNEL SELECT SECTION
WAIT CONTROL SECTION
INTERRUPT CONTROL SECTION
PROTECT and CHIP SELECT GENERATOR SECTION
TIMER SECTION
A2-A11,A23
D0-D31
CPU_CLK
XBCYST
XRESET
XCS2(SRAM)
XCS3(ASIC)
XCS5(PCCARD)
XCS6(DSP)
XIOWR
XIORD
XMWR
XMRD
XLLBEN
XLUBEN
DMARQ0
DMARQ1
DMARQ2
XREADY
INTP0
INTP1
INTP2
INTP3
SRAM_CSSEL
XCS_SRAM
XCS_SRAMH
XCS_FLASH
XCS_DSP
XWR_SRAM
ASIC_CLK
XRESET
A7-A2
WExx
RExx
DMAxx
WAIT
WTxx
INTxx
INT
DMA
AUDIO BLOCK
CD-ROM BLOCK
PERI BLOCK (SIO,PIO, REMOTE CONTROL)
ATAPI BLOCK
PC-CARD BLOCK
SOUND BLOCK
USB BLOCK

●Pin Functions(PD5937A)

Pin No.	Pin Name	I/O	Function and Operation
1	ARMSW	O	LED light output
2	NFANCNT	O	CC Unit Fan motor control output
3	AFANCNT	O	Power amplifier IC Fan motor control output
4	ILMPWR	O	Illumination ON output
5	REAON	O	Illumination color select output, when the rear monitor is ON (H : Green, L : Amber)
6	CNVSS	I	Connect to GND
7	DISC	I	Disc detect input
8	EJECT	I	Disc eject input
9	RESET	I	Reset input
10	XOUT	O	Crystal oscillator connection pin
11	GND		GND
12	XIN	I	Crystal oscillator connection pin
13	VDD		VDD
14	INT	I	Connect to VDD
15	BSENS	I	Backup sense input
16	ASENS	I	ACC sense input
17	FDSEN	I	Grille detach sense input
18	RST3	O	Navigation control reset output
19	AUPW	O	Audio power supply control output
20	DRAMPW	O	Navigation control DRAMPW output
21	BEEP	O	BEEP output
22	RXN	I	Data input from Navigation (UART)
23	TXIN	O	Data output to Navigation (UART)
24	TSO	O	Data output to Hideaway Unit (UART)
25	TSI	I	Data input from Hideaway Unit (UART)
26	TSCK	I	Test program clock input
27	BUSY		Not used
28	CCON	O	Navigation control CCON output
29	XCCSTB	I	Stand-by OK of the CC Unit input
30	CPUWDT	I	Watch dog timer input
31	IRQPW	O	Navigation control IRQPW output
32	RSTOUT	O	Navigation control RSTOUT output
33	MUTEPE		Not used
34	MUTNS	O	Mute output at the time of MIX
35	SELL	O	Navigation voice Lch MIX control output
36	SELR	O	Navigation voice Rch MIX control output
37	VFSEL	O	Front monitor source select output (H : Hideaway Unit, L : MS3)
38	VRSEL	O	Rear monitor source select output (H : Hideaway Unit, L : MS3)
39	VSEL3		Not used
40	DATA		Not used
41	CLK		Not used
42	CS		Not used
43	AMPSTB	O	Amplifier stand-by output
44	ILMSEL	O	Illumination color select output (H : Amber, L : Green)
45	ILMDIM	O	Sub display DIM power supply control output
46	DSENS	I	Detach sense input
47	ILMSENS	I	Illumination sense input
48	PBSENS	I	Parking brake sense input
49	TELIN	I	TEL mute input
50	ASENBO	O	ASENS output
51	MUTESO	O	Mute output
52	LIFTPUL	I	Lift pulse input
53	MTRS	O	Flap motor speed control output
54	MTRPW	O	Flap motor control power supply output
55	MTR1	O	Flap angle motor control signal output
56	MTR1	O	Flap position motor control signal output
57	MTRSEL	O	Flap motor control output
58	ANGLE0SW	I	Flap angle 0 sense input
59	LIFTSW	I	Lift sense input
60	SENSE5	O	Pulse power supply control output
61	ANTPW	O	Auto antenna power output
62	WCONT	I	Wired remote control SEL input
63	TESTIN	I	Test mode input
64	TIMEOUT	I	Timeout input
65-67	SIMUKE0-2	I	Model select input0-2
68	51MUTE	O	5.1 ch mute output
69	NC		Not used
70	WREMIN	I	Wired remote control AD input
71	ATEMPI		Not used
72	ANGLE	I	Flap angle sense input
73	NTEMPI	I	CC Unit temperature input
74	NC		Not used
75	AVSS		A/D GND
76	NC		Not used
77	AVREF		A/D converter reference voltage
78	AVCC		A/D power supply
79	NC		Not used
80	MUTEGU	O	TELIN/GUIDE interrupt notice output

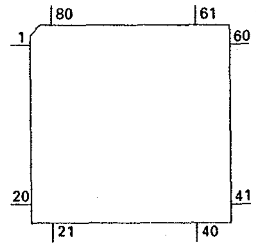
* PD5937A



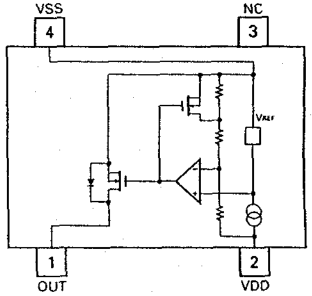
●Pin Functions(PE5413B)

Pin No.	Pin Name	I/O	Function and Operation
1	PNLADX	I	X directions analog input
2	LSEN	I	Lens sense input
3	PNLADY	I	Y directions analog input
4	AVSS		A/D converter GND
5	DIMMER	O	Dimmer anarog output
6	INVBST_DA	O	Back light boost signal output (low temperature)
7	AVREF1		D/A converter reference voltage
8	RXD	I	Data input from system microcomputer (UART)
9	TXD	O	Data output to system microcomputer (UART)
10	MFLPW	O	Back light control output
11	LKYDT	I	Data input from LCD micro computer (UART)
12	LDPDT	O	Data output to LCD micro computer (UART)
13	MVIPW	O	Picture power supply control output
14	OSDCS	O	OSD chip select output
15	NC		Not used
16	TSI	I	Test program data input
17	TSO	O	Test program data output
18	TSCK	I	Test program clock input
19	OVICHK	I	Back light power supply overcurrent detect input
20	EPRRST	I	EEPROM reset input
21	EPRTEST	I	EEPROM data setup mode input
22	STEST	I	Monitor operation mode input
23	STEST2	I	Touch panel test mode input
24	PNLXV	O	Hi output is carried out when X directions is detected
25	PNLYV	O	Hi output is carried out when Y directions is detected
26	NC		Not used
27	SDA	I/O	IC data input / output
28	SCL	O	IC clock output
29	PIPRES	O	IC reset output
30	LSWVDD	O	LCD micro computer power supply control output
31,32	NC		Not used
33	VSS1		GND
34-37	NC		Not used
38	ROMDATA		Not used
39	ROMCLK		Not used
40	POMCS		Not used
41,42	NC		Not used
43	INVBST		Not used
44	INVPUL	O	Inverter pulse output
45	BEEP		Not used
46	EPRCS	O	EEPROM chip select output
47	EPRSK	O	EEPROM serial clock output
48	EPRDO	O	EEPROM serial data output
49	EPRDI	I	EEPROM serial data input
50	EPRPROT	O	EEPROM memory protect output
51	TESTIN	I	Chip test input
52	NC		Not used
53	LDIMMER		Not used
54	LBKL	O	LCD micro computer back light power supply control output
55,56	NC		Not used
57	LCDTYPE1	I	LCD panel type detect input1
58	NC		Not used
59	LCDTYPE2	I	LCD panel type detect input2
60	RESET	I	Reset input
61	REMIN	I	Remote control data input
62	VDDSENS	I	Power supply sense input
63	ROT0	I	Rotary encoder input0
64	ROT1	I	Rotary encoder input1
65	LCDLR		Not used
66	TVIND		Not used
67	VSS0		GND
68	VDD1		Power supply
69	X2		Crystal oscillator connection pin
70	X1		Crystal oscillator connection pin
71	VPP		Not used
72	XT2		Not used
73	XT2		GND
74	VDD0		Power supply
75	AVDD		A/D converter power supply
76	KEY0	I	Analog key data input 0
77	KEY1	I	Analog key data input 1
78	KEY2	I	Analog key data input 2
79	NC		Not used
80	TEMPSEN	I	Temperature sense input (back light boost)

* PE5413B



* S-80835CNNB-B8U



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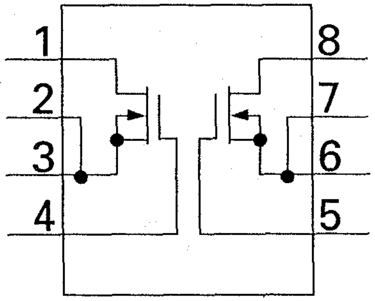
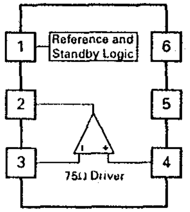


TK15404AMI



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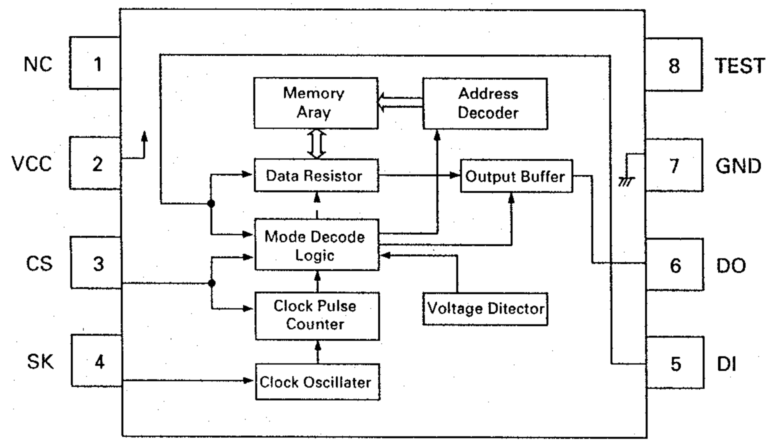
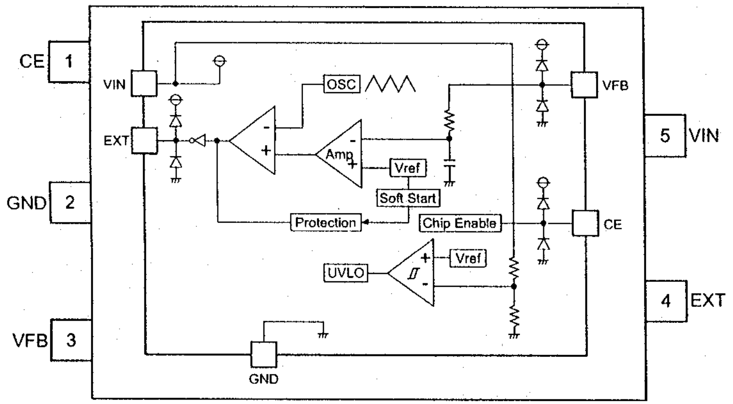
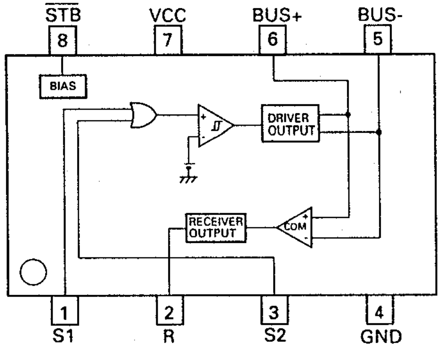

NC
1
VCC
2
CS
3
SK
4
8
TEST
7
GND
6
DO
5
DI
Memory Aray
Address Decoder
Data Resistor
Output Buffer
Mode Decode Logic
Clock Pulse Counter
Voltage Ditector
Clock Oscillater

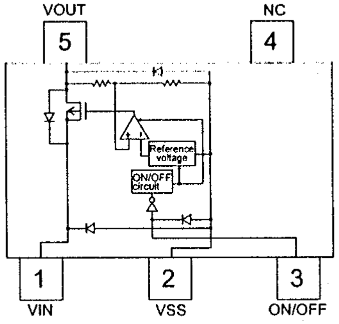
* R1224N102H


CE
1
GND
2
VFB
3
5
VIN
4
EXT
VIN
EXT
VFB
CE
GND
OSC
Amp
Vref
Soft Start
Protection
Chip Enable
UVLO
Vref

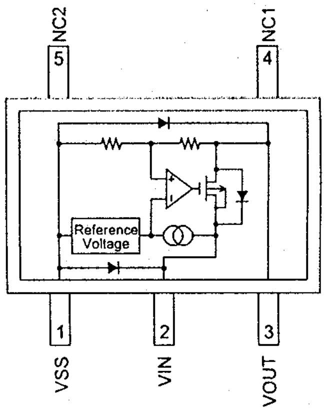
HA12240FP


STB
8
VCC
7
BUS+
6
BUS-
5
BIAS
DRIVER OUTPUT
RECEIVER OUTPUT
COM
1
S1
2
R
3
S2
4
GND

* S-L2980A50MC-C7J

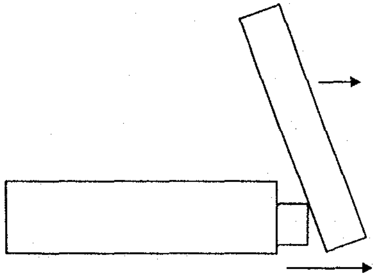

VOUT
5
NC
4
Reference voltage
ON/OFF circuit
1
VIN
2
VSS
3
ON/OFF

* S-812C33AMC-C2N

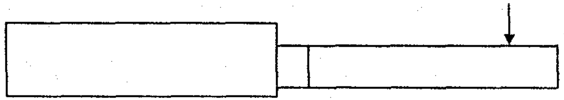

NC2
5
NC1
4
Reference Voltage
1
VSS
2
VIN
3
VOUT

● Explanation on the FLAP temporary folding operation

1. By pressing the temporary folding key, the angle driving motor is rotated from the monitor stop position toward 0° direction. When the setback is being set to ON, the forward/backward driving motor is rotated when the key is pressed, brake is applied after 600ms has elapsed from the time when LIFTSW has switched from H to L, and the angle driving motor is rotated in 0° direction.



2. For a period of 500ms after DEGOSW has switched from H to L, the angle driving motor is rotated, and the monitor stops at its horizontal position by the brake. After 7 seconds, navigator operation sound is heard three times in 1 second interval. After 10 seconds, the angle driving motor is rotated in UP direction, and then the brake is applied to stop the motor at the last memory position. When the setback is being set to ON, after the angle driving motor stops at the last memory position, the forward/backward driving motor is rotated in slow speed in the horizontal storage direction, and the motor stops after LIFTSW has switched from L to H.



● Notes related to the FLAP motion

1. Regarding the angle position, angle voltage is always checked, and the last memory is stored by addition or subtraction of the voltage. It should be noted, however, that the last memory will not be stored when the monitor is manually moved by force.
2. If the expected pulse is not detected during horizontal motion, the monitor will stop at that position.

● Table of driving unit operations by different preset modes

		OPEN state	In OPEN motion	In CLOSE motion	CLOSE state
Auto OPEN/CLOSE setting ON	Bup ON (Reset start)	CLOSE state ↓ CLOSE ↓ OPEN state ↓ Last angle	—	—	Continue OPEN motion ↓ Last angle
	Bup OFF	To stand-by	To stand-by	To stand-by	To stand-by
	Bup OFF→ON	No state change	Continue OPEN motion ↓ Last angle ↓ Return	Continue CLOSE motion ↓ CLOSE	No state change
	ACC ON	No state change	—	—	OPEN motion ↓ Last angle ↓ Return
	ACC OFF→ON	No state change	Continue OPEN motion ↓ Last angle ↓ Return	Continue CLOSE motion ↓ CLOSE	No state change
	ACC OFF	6 sec from ACC OFF ↓ Advance ↓ CLOSE motion ↓ CLOSE	Continue OPEN motion ↓ Last angle ↓ Return ↓ 6 sec from ACC OFF ↓ Advance ↓ CLOSE motion ↓ CLOSE	Continue CLOSE motion ↓ CLOSE	No state change
	Last memory	OPEN	OPEN	CLOSE	CLOSE
Auto OPEN/CLOSE setting OFF	Bup ON (Reset start)	—	—	—	—
	Bup OFF	To stand-by	To stand-by	To stand-by	To stand-by
	Bup OFF→ON	No state change	Continue OPEN motion ↓ Last angle ↓ Return	Continue CLOSE motion ↓ CLOSE	No state change
	ACC ON	No state change	—	—	No state change
	ACC OFF→ON	No state change	Continue OPEN motion ↓ Last angle ↓ Return	Continue CLOSE motion ↓ CLOSE	No state change
	ACC OFF	No state change	Continue OPEN motion ↓ Last angle ↓ Return	Continue CLOSE motion ↓ CLOSE	No state change
	Last memory	OPEN	OPEN	CLOSE	CLOSE

* When the setback is being set to OFF, there will be no advance/return motion.
After ACC OFF, if ACC is switched ON again during the 6 seconds counting, standby will be passed and the FLAP status will not change.

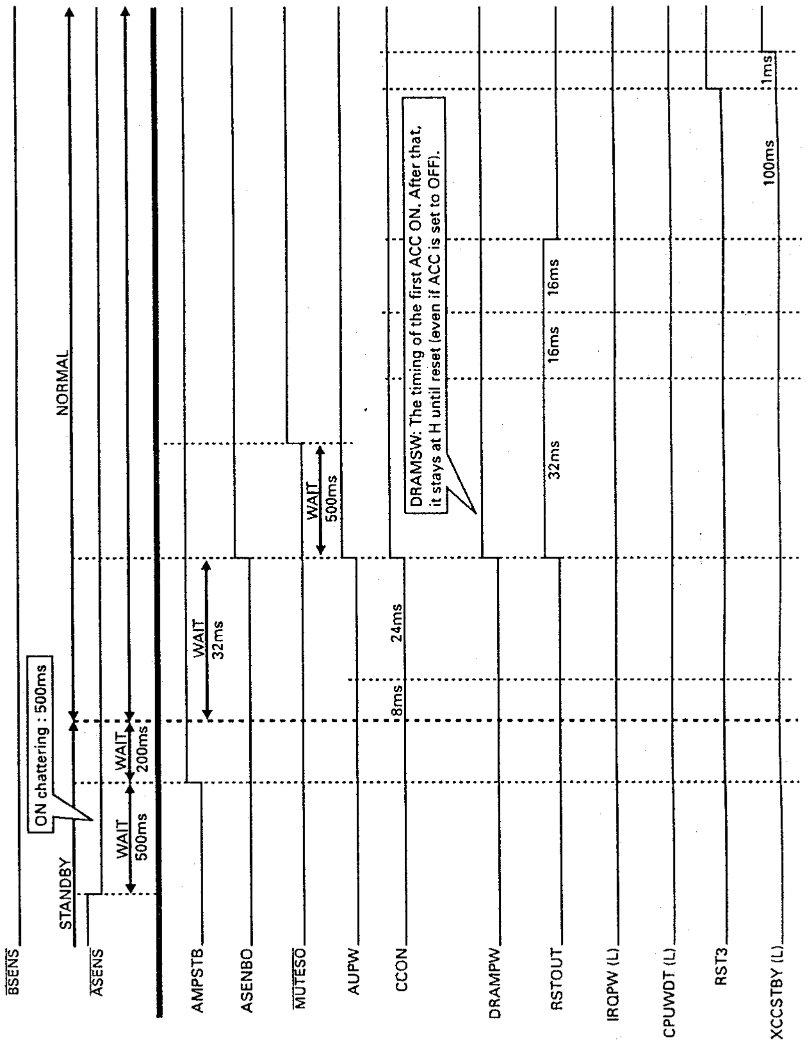
● Table of temporary folding control

		Temporary folding state (horizontal position)	Temporary folding reset (horizontal position→last angle)	Temporary folding in motion (last angle→horizontal position)
Auto OPEN/CLOSE setting ON	Bup ON	—	—	—
	Bup OFF	To stand-by	To stand-by	To stand-by
	Bup OFF→ON	Continue temporary folding motion	Continue OPEN motion ↓ Last angle ↓ Return	Continue temporary folding motion ↓ Temporary folding
	ACC ON	—	—	—
	ACC OFF→ON	OPEN motion ↓ Last angle ↓ Return	Continue OPEN motion ↓ Last angle ↓ Return	Continue temporary folding motion ↓ Temporary folding
	ACC OFF	6 sec from ACC OFF ↓ CLOSE motion ↓ CLOSE	Continue OPEN motion ↓ Last angle ↓ Return ↓ 6 sec from ACC OFF ↓ Advance ↓ CLOSE motion ↓ CLOSE	Continue temporary folding motion ↓ Temporary folding ↓ 6 sec from ACC OFF ↓ CLOSE motion ↓ CLOSE
	Last memory	OPEN	OPEN	OPEN
Auto OPEN/CLOSE setting OFF	Bup ON	—	—	—
	Bup OFF	To stand by	To stand by	To stand by
	Bup OFF→ON	Continue temporary folding motion	Temporary folding reset	Temporary folding in motion
	ACC ON	—	—	—
	ACC OFF→ON	OPEN motion ↓ Last angle ↓ Return	Continue OPEN motion ↓ Last angle ↓ Return	OPEN motion ↓ Last angle ↓ Return
	ACC OFF	OPEN motion ↓ Last angle ↓ Return	Continue OPEN motion ↓ Last angle ↓ Return	OPEN motion ↓ Last angle ↓ Return
	Last memory	OPEN	OPEN	OPEN

* When the setback is being set to OFF, there will be no advance/return motion.

7.3.2 OPERATIONAL FLOW CHART

● Navigation Unit (1) (ACC ON)

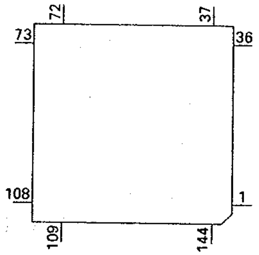

BSENS
ASENS
STANDBY
NORMAL
ON chattering : 500ms
WAIT 500ms
WAIT 200ms
AMPSTB
WAIT 32ms
ASENBO
MUTESO
WAIT 500ms
AUPW
8ms
24ms
CCON
DRAMPW
RSTOUT
32ms
16ms
16ms
IRQPW (L)
CPUWDT (L)
RST3
XCCSTBY (L)
100ms
1ms

DRAMSW: The timing of the first ACC ON. After that, it stays at H until reset (even if ACC is set to OFF).

●Pin Functions(PD3390A)

Pin No.	Pin Name	I/O	Format	Function and Operation
1	VCC0			Power supply (3.3V)
2	VSS0			GND
3	TXD2	I/O		SIO2 Transmission data input / output
4	RXD2	I/O		SIO2 Reception data input / output
5	TXD1	O	C	SIO1 Transmission data output
6	RXD1	I		SIO1 Reception data input
7	TXD0	O	C	SIO0 Transmission data output
8	RXD0	I		SIO0 Reception data input
9	SPEED	I		SP I/F input
10	ADCSB	O	C	AD I/F output
11	ADSCK	O	C	AD I/F output
12	ADTXD	O	C	AD I/F output
13	ADRXD	I		AD I/F input
14	ADSRX	I		AD I/F input
15	ADIO0	I/O		AD I/F input / output
16	ADIO1	I/O		AD I/F input / output
17	ADIO2	I/O		AD I/F input / output
18	VCC1			Power supply (3.3V)
19	VSS1			GND
20	PWM	O		PWM signal output
21	PLINT	I		PLL I/F input
22	PLCE	O	C	PLL I/F output
23	PLSCK	O	C	PLL I/F output
24	PLTX	O	C	PLL I/F output
25	PLRX	I		PLL I/F input
26	PLIO0	I/O		PLL I/F input / output
27	PLIO1	I/O		PLL I/F input / output
28	PLIO2	I/O		PLL I/F input / output
29	DDINT	I		Darc I/F input
30	DDCE	O	C	Darc I/F output
31	DDSCK	O	C	Darc I/F output
32	DDTX	O	C	Darc I/F output
33	DDRX	I		Darc I/F input
34	DDIO0	I/O		Darc I/F input / output
35	DDIO1	I/O		Darc I/F input / output
36	DDIO2	I/O		Darc I/F input / output
37	TIOA0	I/O		Parallel input / output
38	TIOA1	I/O		Parallel input / output
39	TIOB0	I/O		Parallel input / output
40	TIOB1	I/O		Parallel input / output
41	VCC2			Power supply (3.3V)
42	VSS2			GND
43-53	A19-9	I/O		Address bus input / output
54	VCC3			Power supply (3.3V)
55	VSS3			GND
56-64	A8-0	I/O		Address bus input / output
65	VCC4			Power supply (3.3V)
66	VSS4			GND
67-82	D0-15	I/O		Address bus input / output
83	VCC5			Power supply (3.3V)
84	VSS5			GND
85	WRHB	I/O		Upper data write strobe input / output
86	WRLB	I/O		Lower data write strobe input / output
87	RDB	I/O		Read data strobe input / output
88	CS2B	I/O		Chip select aria 1 for external storage input / output
89	CS0B	I/O		Chip select aria 0 for ROM input / output
90	VCC6			Power supply (3.3V)
91	VSS6			GND
92	TEST2			Test mode
93	CKOEB	I		CK output enable input
94	CK	O	C	CPU clock output
95	CS5B	O	C	DRAM low address strobe output
96	CS3B	O	C	DRAM column address strobe output
97	CS1B	O	C	DRAM column address upper byte strobe output
98	RTCVSS1			Power supply (3.3V)
99	SRAMB	I		Backup memory select input
100	STANBYB	I		Stand by signal input
101	RTCVSS0			GND
102	XRTCIN	I		Sub crystal oscillator input (RTC)
103	XRTCOUT	O	C	Sub crystal oscillator output (RTC)
104	RTCVCC			Power supply (3.3V)
105	PCKSEL0	I		Processor clock select input
106	PCKSEL1	I		Processor clock select input
107	CCKSEL	I		CRCK signal select input
108	CCKDIR	I/O		Carrier clock direct input / inverter amp output
109	CCKVCC			Power supply (3.3V)
110	CRCK	I		Carrier clock input
111	CCKGND			GND
112-118	PC0-6	I/O		Parallel input / output
119	NMI			Connect to VCC
120	RESETB	I		System reset input
121	MSTRSTB	I		Test reset input
122	TEST0	I		Test mode input
123	TEST1	I		Test mode input
124	REFSEL	I		GPS reference clock select input
125	REFCK	I		Reference clock input
126	VCC7			Power supply (3.3V)
127	VSS7			GND
128	XAUXIN	I		Sub crystal oscillator output input (AUX)
129	XAUXOUT	O	C	Sub crystal oscillator output (AUX)
130-133	PIN0-3	I		Parallel input
134-137	PIO4-7	I/O		Parallel input / output
138	TXD3	I/O		SIO3 Transmission data input / output
139	RXD3	I/O		SIO3 Reception data input / output
140	BOWWOWB	O	C	Watch dog timer output
141	IFDIR	I/O		IF direct input / IF inverter amp output
142	IFVCC			Power supply (3.3V)
143	IF	I		IF input
144	IFGND	I		IF amp GND input

* PD3390A

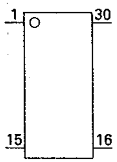


Format	Meaning
C	C MOS

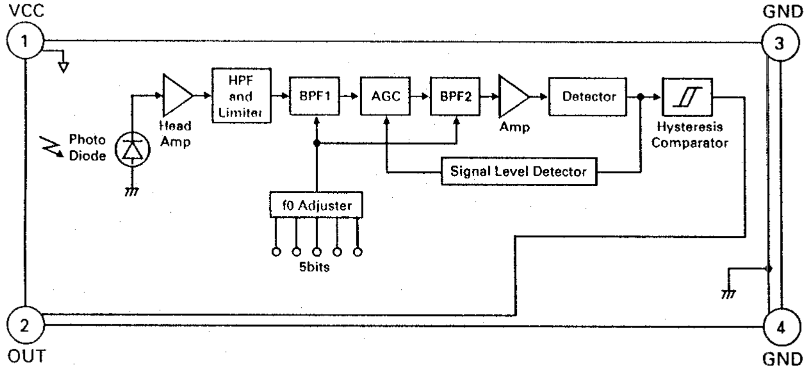
●Pin Functions(LC72720YVS : EW model)

Pin No.	Pin Name	I/O	Function and Operation
1	VREF	O	Reference voltage output
2	MPXIN	I	Base band (multiplexed) signal input
3	Vdda		Analog system power supply (+5V)
4	NC		Not used
5	Vssa		Analog system GND
6	FLOUT	O	Sub carrier output (filter output)
7	CIN	I	Sub carrier input (comparator input)
8	NC		Not used
9	T1	I	Test input (connect to GND)
10	T2	I	Test input (stand-by control)
11	T3	O	RDS clock output
12	NC		Not used
13	T4	O	RDS data output
14	T5	O	Soft-decision control data output
15	XOUT	O	Crystal oscillator output
16	XIN	I	Crystal oscillator input
17	Vddd		Digital system power supply (+5V)
18	Vssd		Digital system GND
19	NC		Not used
20	T6	O	Error status,regenerated carrier and error block count outputs
21	T7	O	Error correction status, SK detection and error block count outputs
22	SYNC	O	Block synchronization detection output
23	NC		Not used
24	RDS-ID	O	RDS detection output
25	DO	O	Data output
26	CL	I	Clock input
27	NC		Not used
28	DI	I	Data input
29	CE	I	Chip enable input
30	SYR	I	Synchronization and RAM address reset input

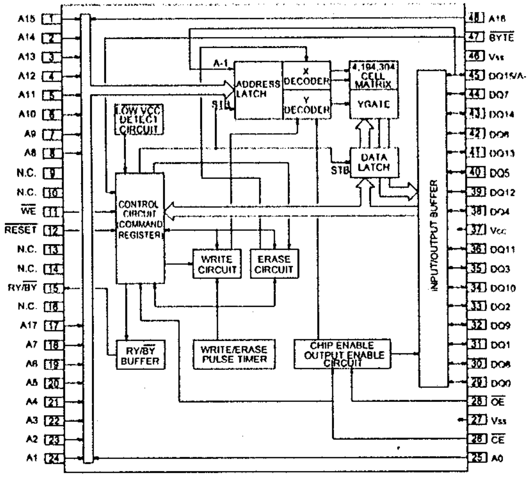
* LC72720YVS(EW model)



SBX3050-01


VCC
1
GND
3
Photo Diode
Head Amp
HPF and Limiter
BPF1
AGC
BPF2
Amp
Detector
Hysteresis Comparator
Signal Level Detector
f0 Adjuster
5bits
2
OUT
4
GND

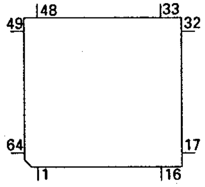
* PD6473A(UC model)
* PD6472A(EW model)


A15 1
A14 2
A13 3
A12 4
A11 5
A10 6
A9 7
A8 8
N.C. 9
N.C. 10
WE 11
RESET 12
N.C. 13
N.C. 14
RY/BY 15
N.C. 16
A17 17
A7 18
A6 19
A5 20
A4 21
A3 22
A2 23
A1 24
48 A16
47 BYTE
46 Vss
45 DQ15/A-1
44 DQ7
43 DQ14
42 DQ6
41 DQ13
40 DQ5
39 DQ12
38 DQ4
37 Vcc
36 DQ11
35 DQ3
34 DQ10
33 DQ2
32 DQ9
31 DQ1
30 DQ8
29 DQ0
28 OE
27 Vss
26 CE
25 A0
A-1
ADDRESS LATCH
STB
X DECODER
Y DECODER
4,194,304 CELL MATRIX
YGATE
DATA LATCH
STB
LOW VCC DETECT CIRCUIT
CONTROL CIRCUIT (COMMAND REGISTER)
WRITE CIRCUIT
ERASE CIRCUIT
RY/BY BUFFER
WRITE/ERASE PULSE TIMER
CHIP ENABLE OUTPUT ENABLE CIRCUIT
INPUT/OUTPUT BUFFER

● Pin Functions (PD6340A)

Pin No.	Pin Name	I/O	Function and Operation
1-5	SEG4-0	O	LCD segment output
6-9	COM3-0	O	LCD common output
10	VLCD		LCD drive power supply
11-14	KST3-0	O	Key strobe output
15,16	KDT0,1	I	Key data input (analogue input)
17	REM	I	Remote control reception input
18	DPDT	I	Display data input
19	NC		Not used
20	KYDT	O	Key data output
21	MODA		GND
22	XO		Crystal oscillator connection pin
23	XI		Crystal oscillator connection pin
24	VSS		GND
25,26	KDT2,3	I	Key data input
27,28	KST5,4	O	Key strobe output
29-55	SEG39-13	O	LCD segment output
56	VDD		Power supply
57-64	SEG12-5	O	LCD segment output

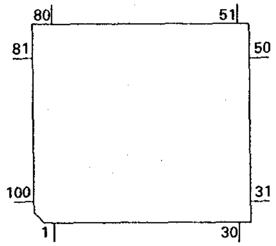
* PD6340A


48
33
49
32
64
17
1
16

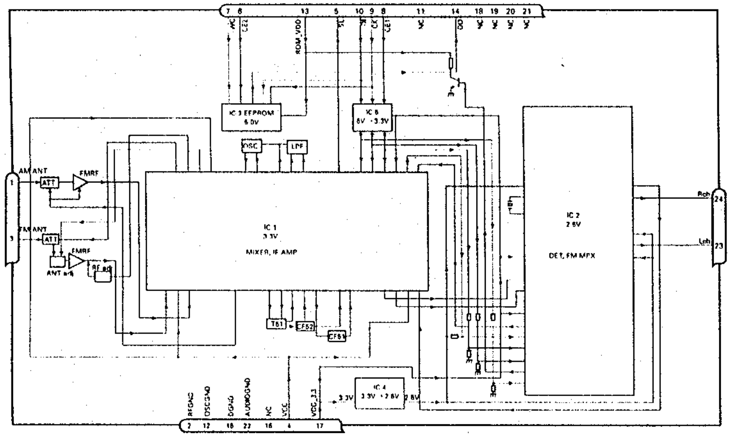
●Pin Functions(PE5412B : UC model)(PE5411B : EW model)

Pin No.	Pin Name	I/O	Function and Operation
1	HTOP	O	UART output to power supply microcomputer
2	HFANCONT		Not used
3-5	NC		Not used
6	MTOH	I	UART input from monitor microcomputer
7	HTOM	O	UART output to monitor microcomputer
8	TSCK		Not used
9	EVDD		Power supply
10	EVSS		GND
11	MUTEAMP	O	Mute output (AMP)
12	ACCPW		Not used
13	SWACPW	O	Monitor microcomputer power supply output
14	HACCPW	O	Hide away power supply ON/OFF output
15-17	NC		Not used
18	SWBUPSW		Not used
19	SWVDDSW		Not used
20	HFANON		Not used
21	VPP		VSS
22	VCK	O	E-VOL : Clock output
23	VDT	O	E-VOL : Data output
24	VST	O	E-VOL : Strobe pulse output
25	MUTEVOL	O	E-VOL : Mute output
26	RX	I	IP-BUS : Data input
27	TX	O	IP-BUS : Data output
28	IPPW	O	IP-BUS : Driver power supply control output
29	ASENBO	O	IP-BUS : Slave ACC sense output
30	NC		Not used
31	ROMDATA		Not used
32	ROMCLK		Not used
33	ROMCS		Not used
34	RESET	I	Reset input
35	XT2		Open
36	XT1		Pull up
37	REGC		Memory connection for the regulator stabilization
38	X2		Crystal oscillator connection pin
39	X1		Crystal oscillator connection pin
40	VSS		GND
41	VDD		Power supply
42	PCL		Clock output
43	NC		Not used
44	REVSENS	I	Reverse signal sense input
45,46	STEST1,2	I	Single operation mode input1,2
47,48	SIMUKE1,2		Not used
49	TESTIN	I	Test mode input
50	NC		Not used
51,52	VSELIN1,2	I	VSEL input1,2
53	AVONIN	I	AV-BUS : AV ON input
54-57	NC		Not used
58	BVDD		Power supply
59	BVSS		GND
60	RECIVE		Not used
61	RDSHSLK	I	RDS : High speed signal input (EW model)
62	RDSLK	I	RDS : Signal input (EW model)
63	RDT	I	RDS : Data input (EW model)
64	NC		Not used
65,66	TUNCE1,2	O	PLL chip enable output1,2
67	NC		Not used
68	HMUTEA	O	Rear voice mute output
69	HMUTEV	O	Rear picture driver stand-by output
70	NC		Not used
71	SCL	I/O	IIC-BUS : Clock input/output
72	SDA	I/O	IIC-BUS : Data input/output
73	AVSELMUTE		Not used
74	AVDD		VDD
75	AVSS		VSS
76	AVREF		Not used
77	TUNSL	I	FM/AM tuner : Signal level analog input
78	TEMP		Not used
79-89	NC		Not used
90	BSENS	I	Backup sense input
91	ASENS	I	ACC sense input
92	TUNLDET	I	Tuner : PLL lock detect input (EW model)
93	RDSCK	I	RDS : Data clock input (EW model)
94-96	NC		Not used
97	TUNPDI	I	FM/AM tuner : PLL data input
98	TUNPDO	O	FM/AM tuner : PLL data output
99	TUNCK	O	PLL clock output
100	PTOH	I	UART input from power supply microcomputer

* PE5412B(UC model)
* PE5411B(EW model)

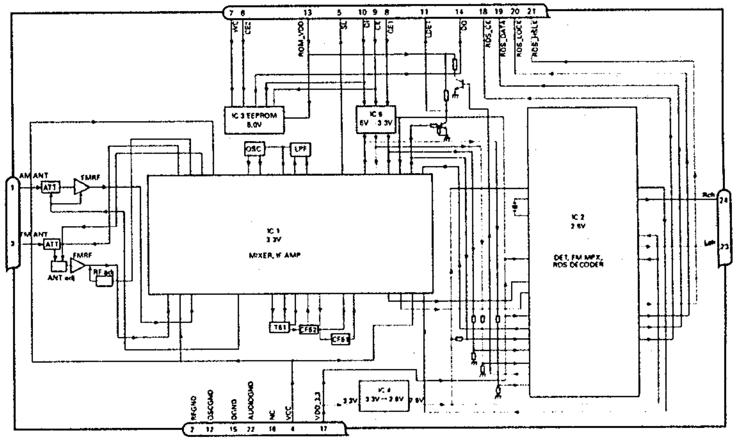


● FM/AM Tuner Unit (AVIC-N2/XU/UC)


AM ANT
FM ANT
ATT
FMRF
ANT a/d
RF BG
IC 3 EEPROM 5.0V
IC 5 5V→3.3V
OSC
LPF
IC 1 3.3V MIXER, IF AMP
IC 2 2.5V DET, FM MPX
IC 4 3.3V→2.5V
T61
CF52
CF53
Rch
Lch
WC
CE2
ROM_VDD
SL
CE1
CK
DI
DO
RFGND
OSCGND
DGND
AUDIOGND
NC
VCC
VDD_3.3

No.	Symbol	I/O	Explain	
1	AMANT	I	AM antenna input	AM antenna input high impedance AMANT pin is connected with an all antenna by way of 4.7μH. (LAU type inductor) A series circuit including an inductor and a resistor is connected with RF ground for the countermeasure against the hum of power transmission line.
2	RFGND		RF ground	Ground of antenna block
3	FMANT	I	FM antenna input	Input of FM antenna 75Ω Surge absorber(DSP-201M-S00B) is necessary.
4	VCC		power supply	The power supply for analog block. D.C 8.4V ± 0.3V
5	SL	O	signal level	Output of FM/AM signals level
6	CE2	I	chip enable-2	Chip enable for EEPROM "Low" active
7	WC	I	write control	You can write EEPROM, when EEPROM write control is "Low". Ordinary non connection
8	CE1	I	chip enable-1	Chip enable for AF•RF "High" active
9	CK	I	clock	Clock
10	DI	I	data in	Data input
11	NC		non connection	Not used
12	OSCGND		osc ground	Ground of oscillator block
13	ROM_VDD		power supply	Power supply for EEPROM pin 13 is connected with a power supply of micro computer.
14	DO	O	data out	Data output
15	DGND		digital ground	Ground of digital block
16	NC		non connection	Not used
17	VDD_3.3		power supply	The power supply for digital block. 3.3V ± 0.2V
18	NC		non connection	Not used
19	NC		non connection	Not used
20	NC		non connection	Not used
21	NC		non connection	Not used
22	AUDIOGND		audio ground	Ground of audio block
23	L ch	O	L channel output	FM stereo "L-ch" signal output or AM audio output
24	R ch	O	R channel output	FM stereo "R-ch" signal output or AM audio output

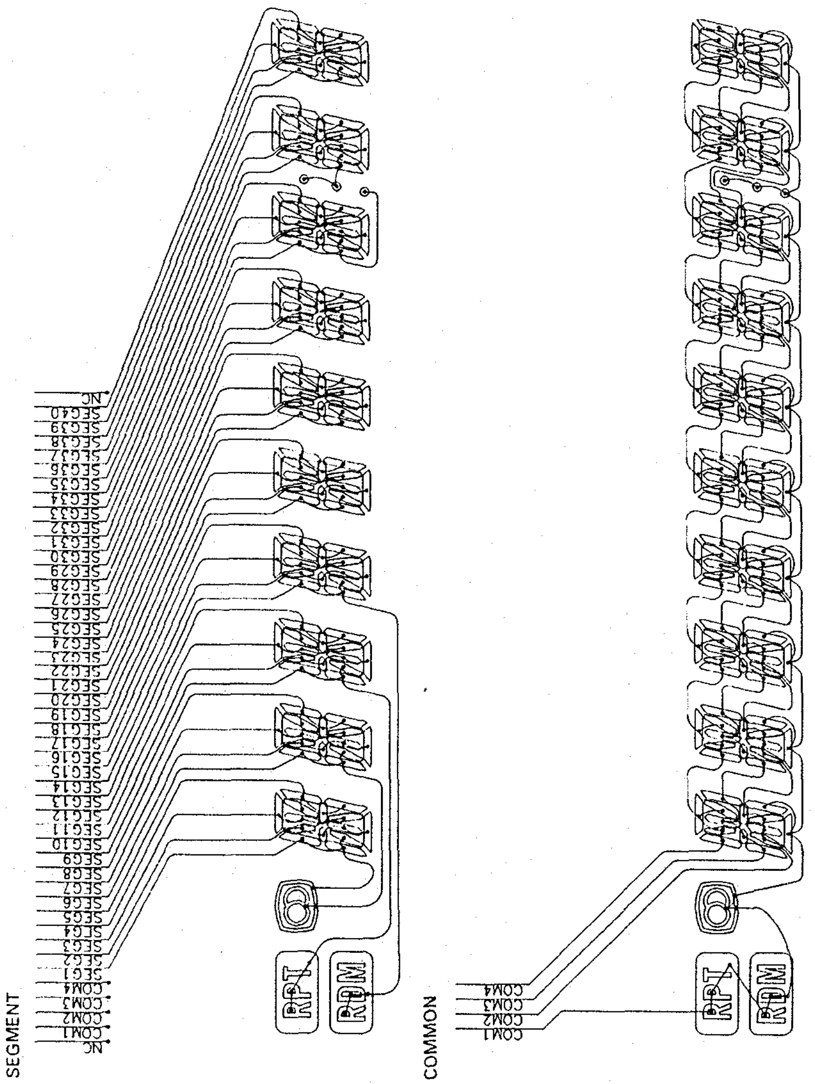
● FM/AM Tuner Unit (AVIC-X1R/XU/EW)


AM ANT
FM ANT
ATT
FMRF
ANT a/d
RF BG
IC 3 EEPROM 8.0V
IC 5 5V 3.3V
OSC
LPF
IC 1 3.3V MIXER, IF AMP
IC 2 2.5V DET, FM MPX, RDS DECODER
IC 4 3.3V→2.5V
T61
CF52
CF53
Rch
Lch
WC
CE2
ROM_VDD
SL
CE1
CK
DI
LDET
DO
RDS_CK
RDS_DATA
RDS_LOCK
RDS_HSLK
RFGND
OSCGND
DGND
AUDIOGND
NC
VCC
VDD_3.3

No.	Symbol	I/O	Explain	
1	AMANT	I	AM antenna input	AM antenna input high impedance AMANT pin is connected with an all antenna by way of 4.7μH. (LAU type inductor) A series circuit including an inductor and a resistor is connected with RF ground for the countermeasure against the hum of power transmission line.
2	RFGND		RF ground	Ground of antenna block
3	FMANT	I	FM antenna input	Input of FM antenna 75Ω Surge absorber(DSP-201M-S00B) is necessary.
4	VCC		power supply	The power supply for analog block. D.C 8.4V ± 0.3V
5	SL	O	signal level	Output of FM/AM signals level
6	CE2	I	chip enable-2	Chip enable for EEPROM "Low" active
7	WC	I	write control	You can write EEPROM, when EEPROM write control is "Low". Ordinary non connection
8	CE1	I	chip enable-1	Chip enable for AF•RF "High" active
9	CK	I	clock	Clock
10	DI	I	data in	Data input
11	LDET	O	lock detector	"Low" active
12	OSCGND		osc ground	Ground of oscillator block
13	ROM_VDD		power supply	Power supply for EEPROM pin 13 is connected with a power supply of micro computer.
14	DO	O	data out	Data output
15	DGND		digital ground	Ground of digital block
16	NC		non connection	Not used
17	VDD_3.3		power supply	The power supply for digital block. 3.3V ± 0.2V
18	RDS_CK	O	RDS clock	Output of RDS clock(2.5V)
19	RDS_DATA	O	RDS data	Output of RDS data(2.5V)
20	RDS_LOCK	O	RDS lock	Output unit "High" active(2.5V) (RDS_LOCK turns over by the external transistor. "Low" active)
21	RDS_HSLK	O	RDS high speed lock	Output unit "High" active(2.5V)(RDS_HSLK turns over by the external transistor. "Low" active)
22	AUDIOGND		audio ground	Ground of audio block
23	L ch	O	L channel output	FM stereo "L-ch" signal output or AM audio output
24	R ch	O	R channel output	FM stereo "R-ch" signal output or AM audio output

7.2.2 DISPLAY

● LCD(CAW1870)


NC
SEG40
SEG39
SEG38
SEG37
SEG36
SEG35
SEG34
SEG33
SEG32
SEG31
SEG30
SEG29
SEG28
SEG27
SEG26
SEG25
SEG24
SEG23
SEG22
SEG21
SEG20
SEG19
SEG18
SEG17
SEG16
SEG15
SEG14
SEG13
SEG12
SEG11
SEG10
SEG9
SEG8
SEG7
SEG6
SEG5
SEG4
SEG3
SEG2
SEG1
COM4
COM3
COM2
COM1
NC
SEGMENT
RPT
RDM
COM4
COM3
COM2
COM1
COMMON
RPT
RDM

7.3 EXPLANATION

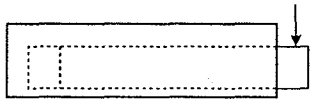
7.3.1 MECHANISM DESCRIPTIONS

● Outline of the FLAP motion

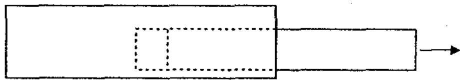
1. The motion is actuated made by two motors, the forward/backward driving motor (CXB9515) and the angle driving motor (CXB9516).
2. Analog electric potential generated by the angle encoder is detected to detect angle motion status and motion position.
3. Memory function for the angle last position is accomplished by the micro processor using the 256 resolution steps of the VDD.
4. A pulse is detected by the photo interrupter to detect the horizontal motion status.
5. In the case of reset start, the monitor will be in a stored position first, and ejection motion will take place, which puts the system in the booted up state.
6. Angle adjustment is made by the angle key (+/-).
7. OPEN/CLOSE key makes the monitor stored or ejected, and temporary folding key folds the monitor temporarily.
8. Setting of the monitor auto storage/ejection ON/OFF and set back ON/OFF at the time of ACC ON/OFF is made on the navigation menu screen.
9. A backlight is switched-off during forward/backward and storage.

● Explanation on the FLAP ejection motion

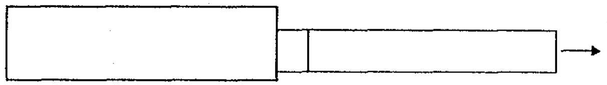
1. When the OPEN key is pressed or ACC is set to ON while the auto OPEN/CLOSE is being set to ON, angle driving motor rotates in the 0° direction for 500ms. (Pressed down.)



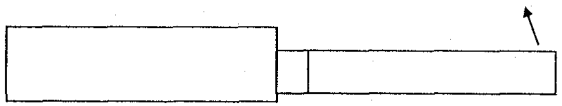
2. After 500ms, the angle driving motor is stopped, and the forward/backward driving motor rotates in the ejection direction.



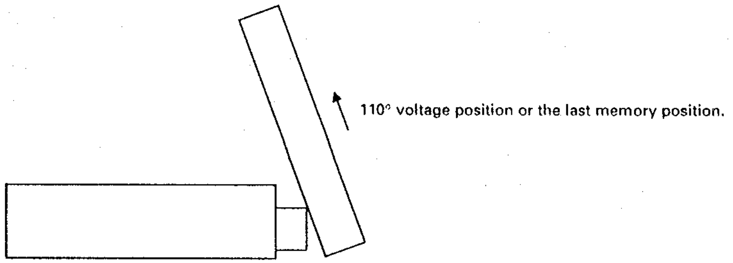
3. For a period of 600ms from the time when LIFTSW is switched from H to L, the forward/backward driving motor keeps rotating in the ejection direction.



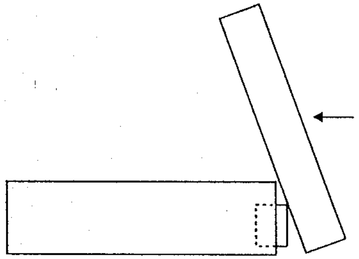
4. After 600ms, the forward/backward driving motor is stopped, and the angle driving motor rotates in the UP direction.



5. When the angle voltage reaches the voltage for 110°, brake is applied to the angle driving motor, and the ejection is completed. (In case the previous angle is stored in the memory, the motion continues to that angle.)

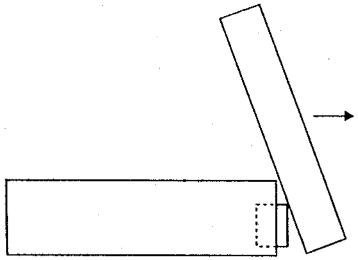


6. When the setback is set to ON, after the monitor angle voltage has reached the previously memorized voltage, brake is applied to the angle driving motor, then the forward/backward driving motor is rotated in slow speed in the storage direction. After that, when LIFTSW has switched from L to H, the forward/backward driving motor is stopped.

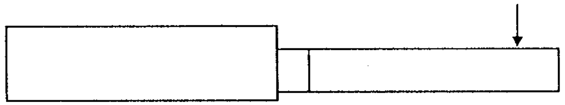


● Explanation of the FLAP storage motion

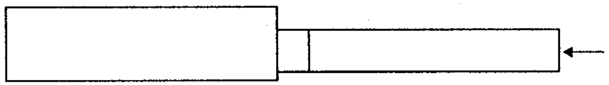
1. When CLOSE key is pressed, or after 6 seconds from ACC OFF when auto OPEN/CLOSE is being set to ON, the angle driving motor is rotated in the 0° direction. In case the setback setting is ON, the forward/backward driving motor is rotated in high speed in the ejection direction and the motor continues to rotate for 600ms from the time when LIFTSW is switched from H to L, then the angle driving motor is rotated in the 0° direction.



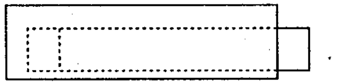
2. For a period of 500ms from the time when DIGOSW is switched from H to L, the angle driving motor is rotated in the 0° direction for the "pressed down" motion.



3. After 500ms, brake is applied to the angle driving motor, and then the forward/backward driving motor is rotated in the storage direction.

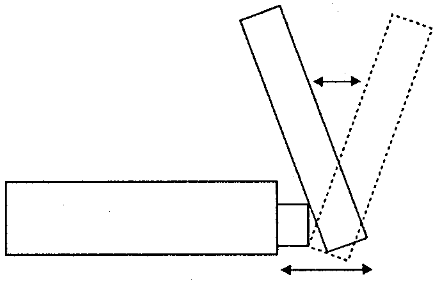


4. When the horizontal motion detection pulse is no longer detected for 200ms, brake is applied and the monitor storage motion is completed.

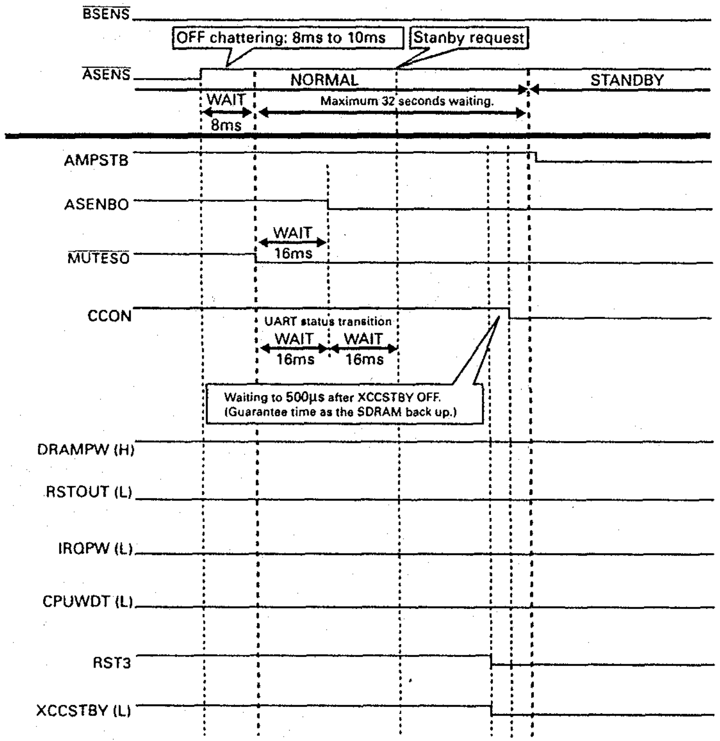


● Explanation on the FLAP angle adjustment

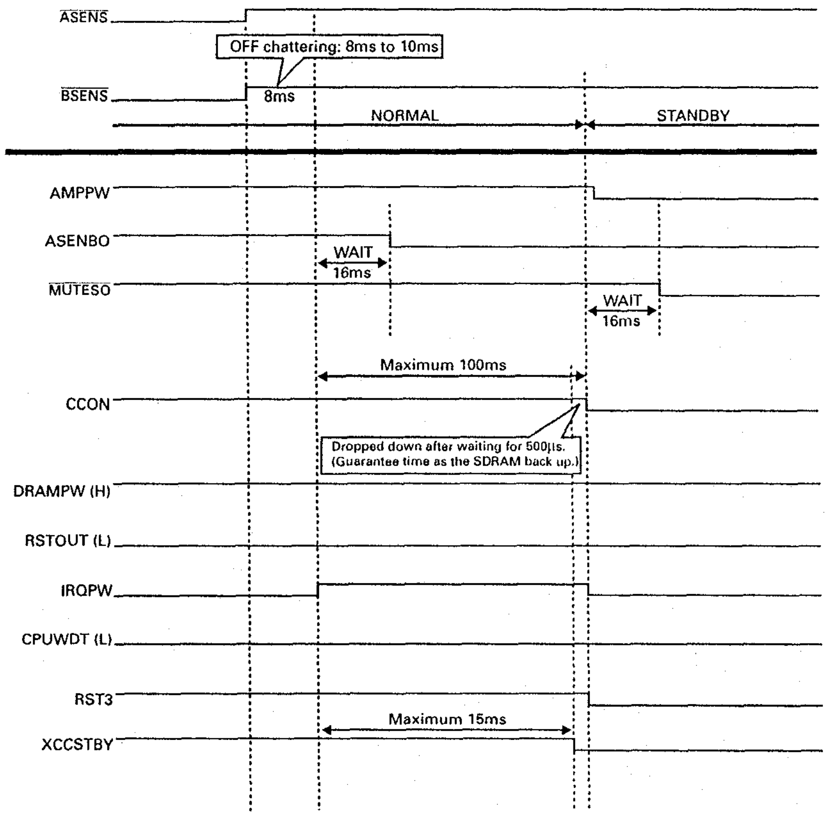
1. The angle driving motor is rotated in UP direction by the "+" key and in DOWN direction by the "−" key from the monitor stop position. If the key is kept pressed, the monitor will keep changing the angle without steps within the range of 50 to 110 degrees. When the setback is being set to ON, the forward/backward driving motor is rotated in the horizontal ejection direction while the key is being pressed, and angle adjustment is made by changing the angle voltage to the extent the angle adjustment key is effective after 600ms has elapsed from the time when LIFTSW has switched from H to L. When 3 seconds have elapsed from the time of angle adjustment completion, the forward/backward driving motor is rotated in slow speed in the horizontal storage direction, and brake is applied when LIFTSW has switched from L to H.



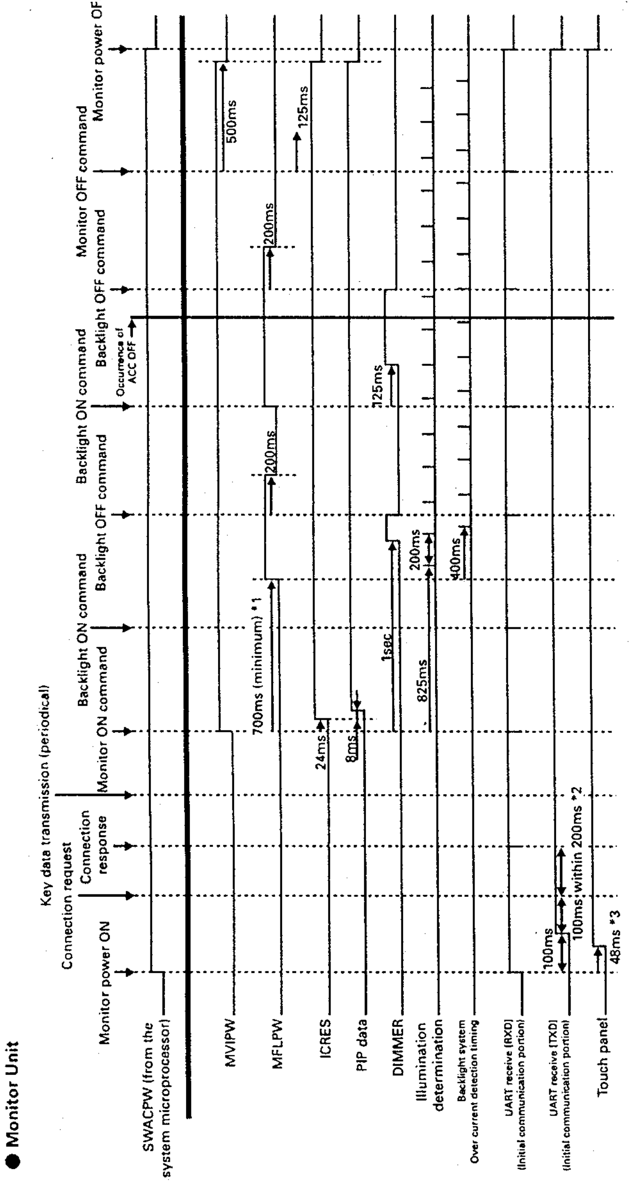
● Navigation Unit (2) (ACC OFF)


BSENS
OFF chattering: 8ms to 10ms
Stanby request
ASENS
NORMAL
STANDBY
WAIT
8ms
Maximum 32 seconds waiting.
AMPSTB
ASENBO
WAIT
16ms
MUTESO
CCON
UART status transition
WAIT
16ms
WAIT
16ms
Waiting to 500µs after XCCSTBY OFF.
(Guarantee time as the SDRAM back up.)
DRAMPW (H)
RSTOUT (L)
IRQPW (L)
CPUWDT (L)
RST3
XCCSTBY (L)

● Navigation Unit (3) (BUP OFF)


ASENS
OFF chattering: 8ms to 10ms
BSENS
8ms
NORMAL
STANDBY
AMPPW
ASENBO
WAIT
16ms
MUTESO
WAIT
16ms
Maximum 100ms
CCON
Dropped down after waiting for 500µs.
(Guarantee time as the SDRAM back up.)
DRAMPW (H)
RSTOUT (L)
IRQPW
CPUWDT (L)
RST3
Maximum 15ms
XCCSTBY

● Monitor Unit


Monitor power ON
Connection request
Connection response
Key data transmission (periodical)
Monitor ON command
Backlight ON command
Backlight OFF command
Backlight ON command
Backlight OFF command
Occurrence of ACC OFF
Monitor OFF command
Monitor power OFF
SWACPW (from the system microprocessor)
MVIPW
MFLPW
ICRES
PIP data
DIMMER
Illumination determination
Backlight system Over current detection timing
UART receive (RXD) (Initial communication portion)
UART receive (TXD) (Initial communication portion)
Touch panel
700ms (minimum) *1
24ms
8ms
1sec
825ms
200ms
400ms
200ms
125ms
200ms
500ms
125ms
100ms
100ms
within 200ms *2
48ms *3

* 1 : While MFLPW will turn ON by the backlight ON command, it will not turn ON for at least 700ms after MVIPW ON.

* 2 : In case connection response is not received from the system microprocessor within 200ms from the transmission of connection request, retry process will take place. Retry process will take place for 200ms x 16 times. In case the retry process is finished without receiving the request signal, the initial communication is determined to be NG (connection NG), and no more process will take place.

* 3 : After 48 ms from the monitor power ON, the touch panel process (taking in AD coordinate) will take place.

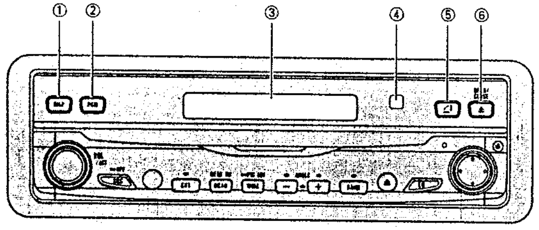
7.4 CLEANING

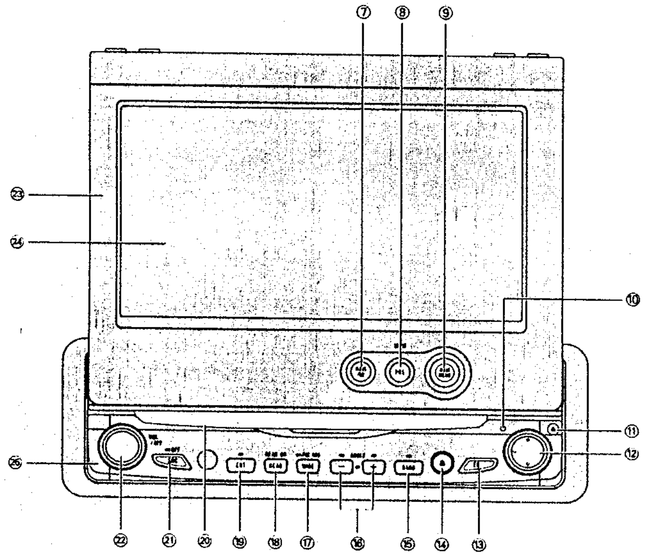
Before shipping out the product, be sure to clean the following portions by using the prescribed cleaning tools:

Portions to be cleaned	Cleaning tools
DVD pickup lenses	Cleaning liquid : GEM1004 Cleaning paper : GED-008

Portions to be cleaned	Cleaning tools
Fans	Cleaning paper : GED-008

8. OPERATIONS





(1) DISP button
Press to select different displays.

(2) PGM button (AVIC-N2/XU/UC)
Press to operate the preprogrammed functions for each source.

(2) TA/NEWS button (AVIC-X1R/XU/EW)
Press to turn traffic announcements function on or off. Press and hold to turn NEWS function on or off.

(3) Sub display
Current time or the information of the audio source currently playing is displayed when the LCD panel is closed.

(4) Ambient light sensor
Senses ambient light. This system automatically adjusts the brightness of the display to compensate for ambient light.

(5) FLIP DOWN/CLOCK button
Press to turn the LCD panel horizontal temporarily when the LCD panel is upright.
Press to turn the clock of the sub display on or off when the LCD panel is closed.

(6) OPEN/CLOSE button
Press to open or close the LCD panel.

(7) NAVI/AV button
Use to switch between Navigation map displays and audio operation displays.

(8) POS button
Press to view the map or return to guidance.
Also, when the map is scrolling, pressing this button returns you to the display of the map of your surroundings.
Use to switch the view mode of the navigation when the map of your surroundings is displayed.

(9) NAVI MENU button
Press to display a menu of Navigation.

(10) RESET button
Press to return to the factory settings (initial settings). Some information items are not erased.

(11) DETACH button
Press to remove the front panel from the display unit.

(12) Joystick
Move to do manual seek tuning, fast forward, reverse and track search controls, etc. Push to display **A.MENU**.

(13) EQ button
Press to select various equalizer curves.

(14) EJECT button
Press to eject a disc from this unit.

(15) BAND button
Radio:
Press to select among three FM and one AM bands.
Built-in DVD drive:
When playing back a disc containing an MP3 file and audio data (CD-DA), pressing this button switches playback between the MP3 file and CD-DA. Touch and hold this button when a disc containing an MP3 file is inserted returns you to the root folder.

(16) ANGLE (+/–) button
Press to change the LCD panel angle.

(17) WIDE button
Press to select a desired mode for enlarging a 4:3 picture to a 16:9 one.
Press and hold to enter the **PICTURE ADJUST** mode.

(18) REAR button
Press to output to the REAR OUT terminal the sound and images of a disc inserted in the built-in DVD drive that is different the currently selected source.

(19) ENT button
Press to switch between the background displays.

(20) Disc loading slot
Insert a disc to play.

(21) SRC (SOURCE) button
This unit is turned on by selecting a source. Press to cycle through all of the available sources.
Press and hold to turn the source off.

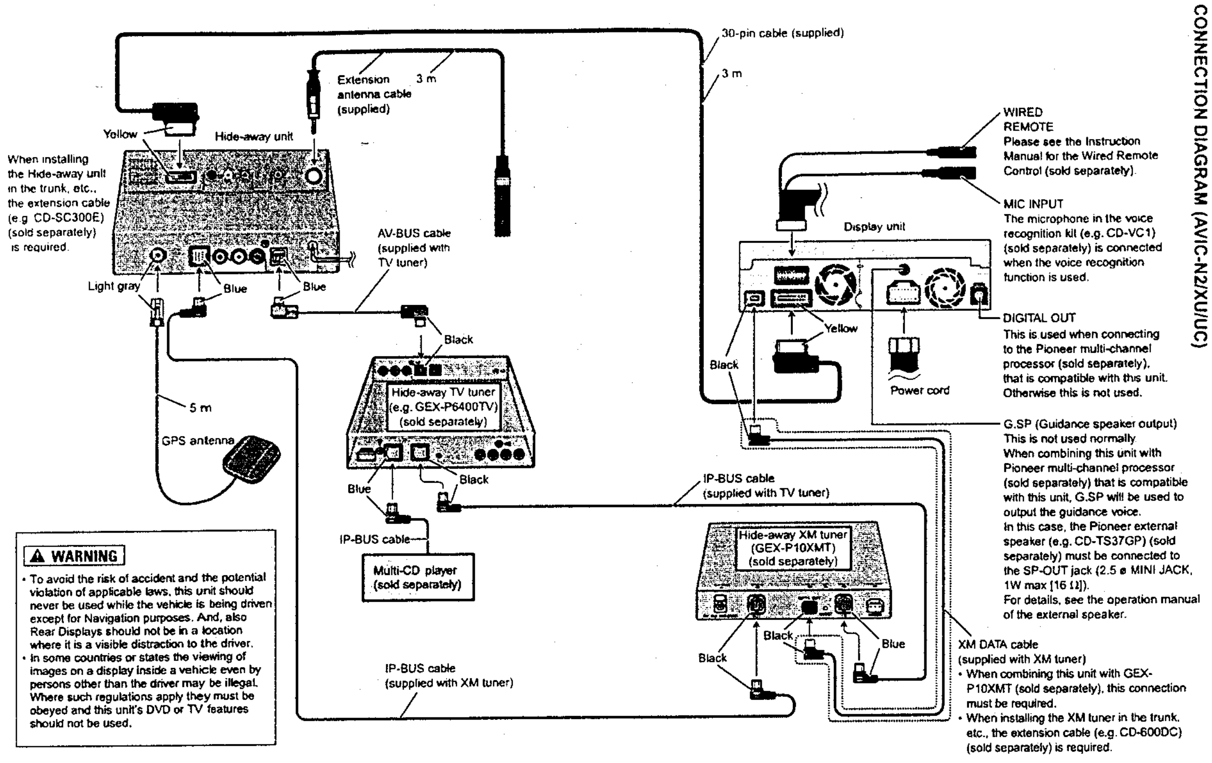
(22) VOLUME/ATT button
Rotate to increase or decrease the volume. Press to quickly lower the volume level, by about 90%.
Press once more to return to the original volume level.

(23) LCD panel

(24) LCD screen

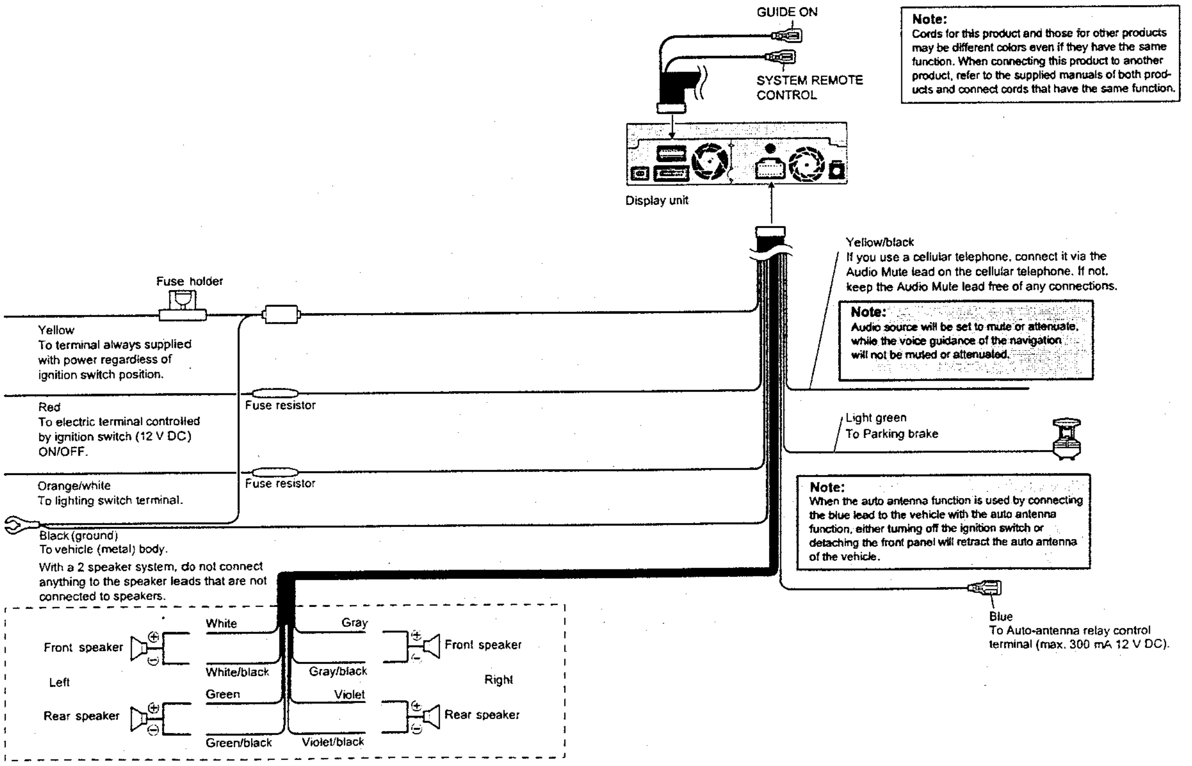
(25) Front panel

● CONNECTION DIAGRAM (AVIC-N2/XU/UC)


30-pin cable (supplied)
3 m
Extension antenna cable (supplied)
3 m
Yellow
Hide-away unit
When installing the Hide-away unit in the trunk, etc., the extension cable (e.g. CD-SC300E) (sold separately) is required.
Light gray
Blue
Blue
AV-BUS cable (supplied with TV tuner)
Black
Hide-away TV tuner (e.g. GEX-P6400TV) (sold separately)
Blue
Black
IP-BUS cable
Multi-CD player (sold separately)
5 m
GPS antenna
IP-BUS cable (supplied with XM tuner)
IP-BUS cable (supplied with TV tuner)
Hide-away XM tuner (GEX-P10XMT) (sold separately)
Black
Black
Blue
Display unit
Yellow
Black
Power cord
WIRED REMOTE
Please see the Instruction Manual for the Wired Remote Control (sold separately).
MIC INPUT
The microphone in the voice recognition kit (e.g. CD-VC1) (sold separately) is connected when the voice recognition function is used.
DIGITAL OUT
This is used when connecting to the Pioneer multi-channel processor (sold separately), that is compatible with this unit. Otherwise this is not used.
G.SP (Guidance speaker output)
This is not used normally.
When combining this unit with Pioneer multi-channel processor (sold separately) that is compatible with this unit, G.SP will be used to output the guidance voice.
In this case, the Pioneer external speaker (e.g. CD-TS37GP) (sold separately) must be connected to the SP-OUT jack (2.5 ø MINI JACK, 1W max [16 Ω]).
For details, see the operation manual of the external speaker.
XM DATA cable
(supplied with XM tuner)
• When combining this unit with GEX-P10XMT (sold separately), this connection must be required.
• When installing the XM tuner in the trunk, etc., the extension cable (e.g. CD-600DC) (sold separately) is required.

⚠ WARNING

- To avoid the risk of accident and the potential violation of applicable laws, this unit should never be used while the vehicle is being driven except for Navigation purposes. And, also Rear Displays should not be in a location where it is a visible distraction to the driver.
- In some countries or states the viewing of images on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply they must be obeyed and this unit's DVD or TV features should not be used.

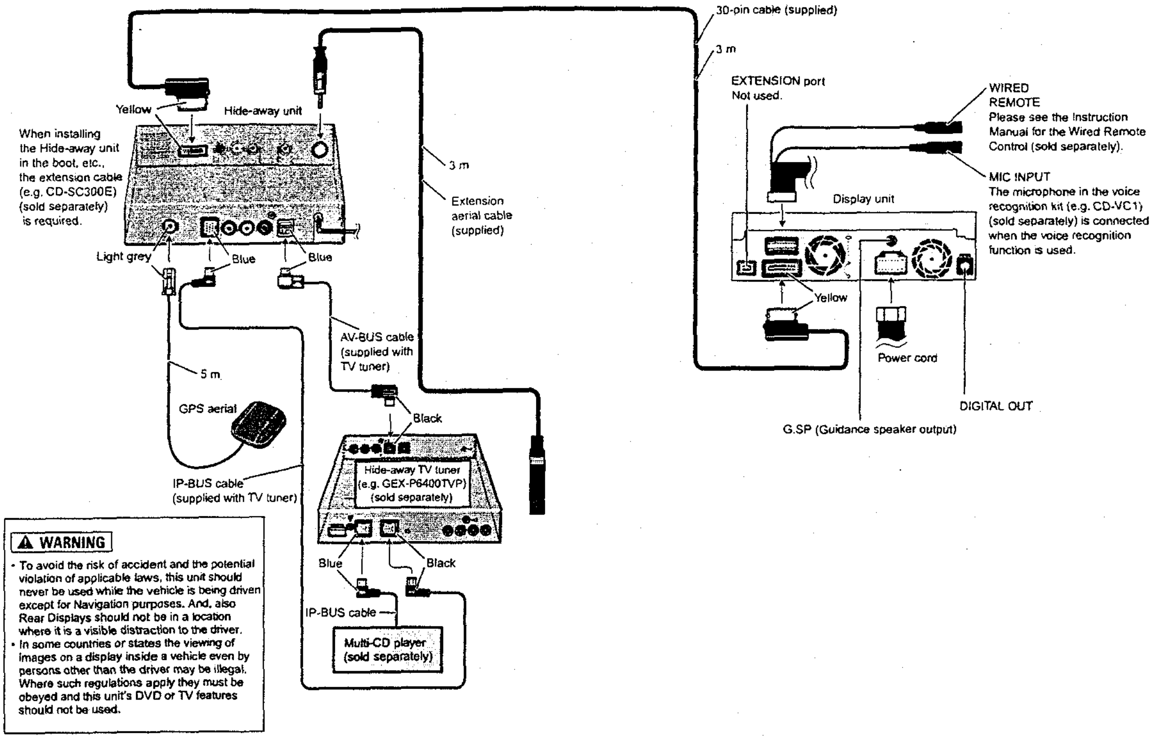

GUIDE ON
SYSTEM REMOTE CONTROL
Display unit
Fuse holder
Yellow
To terminal always supplied with power regardless of ignition switch position.
Red
To electric terminal controlled by ignition switch (12 V DC) ON/OFF.
Fuse resistor
Orange/white
To lighting switch terminal.
Fuse resistor
Black (ground)
To vehicle (metal) body.
With a 2 speaker system, do not connect anything to the speaker leads that are not connected to speakers.
Front speaker
Left
Rear speaker
White
White/black
Green
Green/black
Gray
Gray/black
Violet
Violet/black
Front speaker
Right
Rear speaker
Yellow/black
If you use a cellular telephone, connect it via the Audio Mute lead on the cellular telephone. If not, keep the Audio Mute lead free of any connections.
Light green
To Parking brake
Blue
To Auto-antenna relay control terminal (max. 300 mA 12 V DC).

Note:
Cords for this product and those for other products may be different colors even if they have the same function. When connecting this product to another product, refer to the supplied manuals of both products and connect cords that have the same function.

Note:
Audio source will be set to mute or attenuate, while the voice guidance of the navigation will not be muted or attenuated.

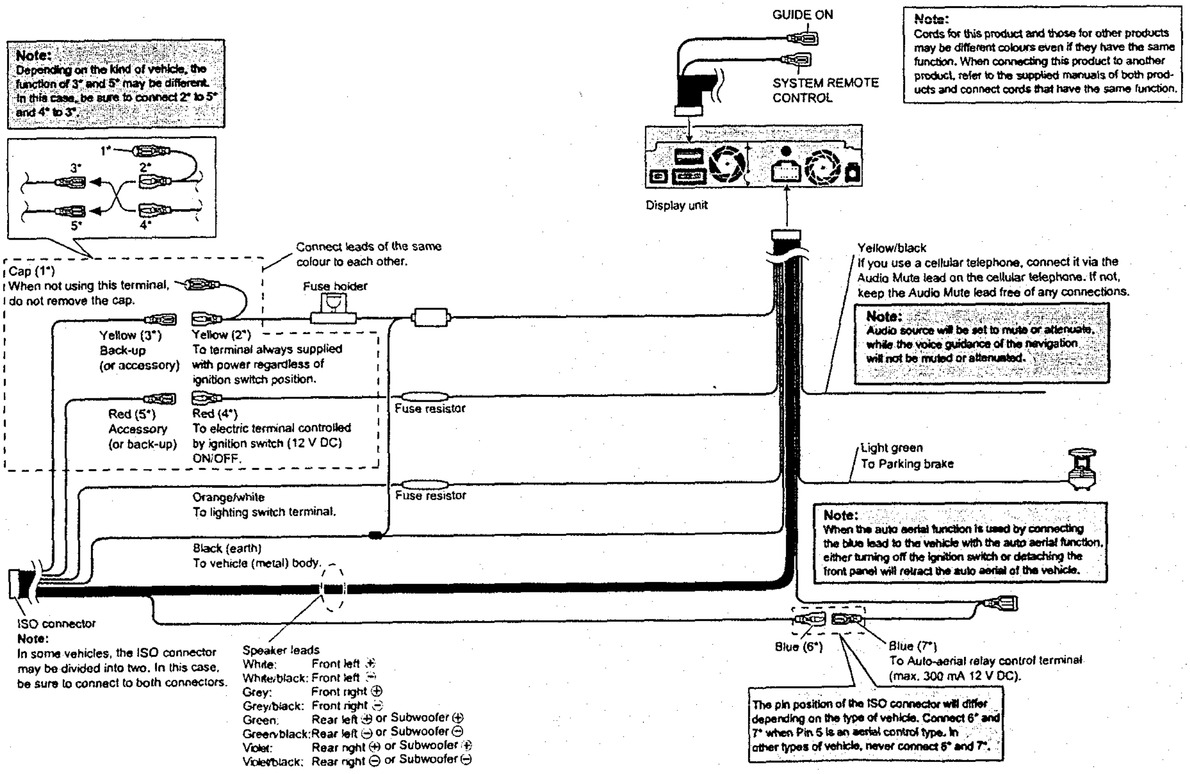
Note:
When the auto antenna function is used by connecting the blue lead to the vehicle with the auto antenna function, either turning off the ignition switch or detaching the front panel will retract the auto antenna of the vehicle.

● CONNECTION DIAGRAM (AVIC-X1R/XU/EW)


30-pin cable (supplied)
3 m
EXTENSION port
Not used.
WIRED
REMOTE
Please see the Instruction Manual for the Wired Remote Control (sold separately).
MIC INPUT
The microphone in the voice recognition kit (e.g. CD-VC1) (sold separately) is connected when the voice recognition function is used.
Display unit
Yellow
Power cord
DIGITAL OUT
G.SP (Guidance speaker output)
Yellow
Hide-away unit
When installing the Hide-away unit in the boot, etc., the extension cable (e.g. CD-SC300E) (sold separately) is required.
Light grey
Blue
Blue
3 m
Extension aerial cable (supplied)
5 m
GPS aerial
AV-BUS cable (supplied with TV tuner)
Black
Hide-away TV tuner (e.g. GEX-P6400TVP) (sold separately)
IP-BUS cable (supplied with TV tuner)
Blue
Black
IP-BUS cable
Multi-CD player (sold separately)

⚠ WARNING

- To avoid the risk of accident and the potential violation of applicable laws, this unit should never be used while the vehicle is being driven except for Navigation purposes. And, also Rear Displays should not be in a location where it is a visible distraction to the driver.
- In some countries or states the viewing of images on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply they must be obeyed and this unit's DVD or TV features should not be used.


GUIDE ON
SYSTEM REMOTE CONTROL
Display unit
1*
2*
3*
4*
5*
Connect leads of the same colour to each other.
Cap (1*)
When not using this terminal, do not remove the cap.
Fuse holder
Yellow (3*)
Back-up
(or accessory)
Yellow (2*)
To terminal always supplied with power regardless of ignition switch position.
Red (5*)
Accessory
(or back-up)
Red (4*)
To electric terminal controlled by ignition switch (12 V DC) ON/OFF.
Fuse resistor
Fuse resistor
Orange/white
To lighting switch terminal.
Black (earth)
To vehicle (metal) body.
ISO connector
Speaker leads
White: Front left ⊕
White/black: Front left ⊖
Grey: Front right ⊕
Grey/black: Front right ⊖
Green: Rear left ⊕ or Subwoofer ⊕
Green/black: Rear left ⊖ or Subwoofer ⊖
Violet: Rear right ⊕ or Subwoofer ⊕
Violet/black: Rear right ⊖ or Subwoofer ⊖
Yellow/black
If you use a cellular telephone, connect it via the Audio Mute lead on the cellular telephone. If not, keep the Audio Mute lead free of any connections.
Light green
To Parking brake
Blue (6*)
Blue (7*)
To Auto-aerial relay control terminal (max. 300 mA 12 V DC).

Note:
Cords for this product and those for other products may be different colours even if they have the same function. When connecting this product to another product, refer to the supplied manuals of both products and connect cords that have the same function.

Note:
Depending on the kind of vehicle, the function of 3* and 5* may be different. In this case, be sure to connect 2* to 5* and 4* to 3*.

Note:
Audio source will be set to mute or attenuate, while the voice guidance of the navigation will not be muted or attenuated.

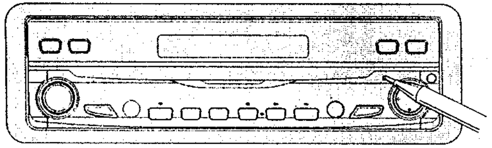
Note:
When the auto aerial function is used by connecting the blue lead to the vehicle with the auto aerial function, either turning off the ignition switch or detaching the front panel will retract the auto aerial of the vehicle.

The pin position of the ISO connector will differ depending on the type of vehicle. Connect 6* and 7* when Pin 5 is an aerial control type. In other types of vehicle, never connect 6* and 7*.

ISO connector
Note:
In some vehicles, the ISO connector may be divided into two. In this case, be sure to connect to both connectors.

After Installing the Unit

1. **Reconnecting the battery.**
   First, double-check that all connections are correct and that the unit is installed correctly. Reassemble all vehicle components that you previously removed. Then reconnect the negative (–) cable to the negative (–) terminal of the battery.
2. **Start the engine.**
3. **Press the RESET button on the display unit.**
   Press the RESET button on the display unit using a pointed object such as the tip of a pen.



4. **Enter the following settings:**
   - Install the programme in the navigation system.
   - Drive until the initialized sensors start operating normally.
   - Set the time and language.

Note:
If you reconnected the Hide-away unit, press the RESET button.

After installing the unit, be sure to check at a safe place that the vehicle is performing normally.

● JIG's List

Function	Name	Jig No.
CC Unit (CN609) <--> Main Unit (CN3801)	PCB	GGF1461
CC Unit (CN609) <--> GGF1461	40P FFC	GGD1170
CC Unit (CN609) <--> GGF1461	20P FFC	GGD1209
CC Unit (CN608) <--> Monitor PCB (CN4002)	PCB	GGF1483
CC Unit (CN2701) <--> Panel PCB (CN5901)	18P FFC	GGD1208
Monitor PCB (CN4002) <--> GGF1483	36P FFC	GGD1366
Monitor Adjustment PCB	PCB	GGF1416
JIG connector Assy	PCB and FFC	GGF1463
Monitor PCB ("FOR SERVICE" 14P terminal) <--> GGF1463	14P FFC	GGD1323
TEST DISC (Operation check)	CD-ROM or DVD-ROM	GGV1137
DVD pickup lenses	CLEANING LIQUID	GEM1004
DVD pickup lenses and Fans	CLEANING PAPER	GED-008